

Irish Rural Life and Industry.

With suggestions for the future



Ec.H
1687i
c.1
ROBA

Issued in connection with
The Home Industries Section
Irish International Exhibition
1907

FOR THE SKIN You Require

The very best Soap

IF Nature presented you with a good Complexion
it is your duty to try to RETAIN it.

IF no



It is
from
ingre
fume
Flor

Presented to the Library
OF THE
University of Toronto.

BY

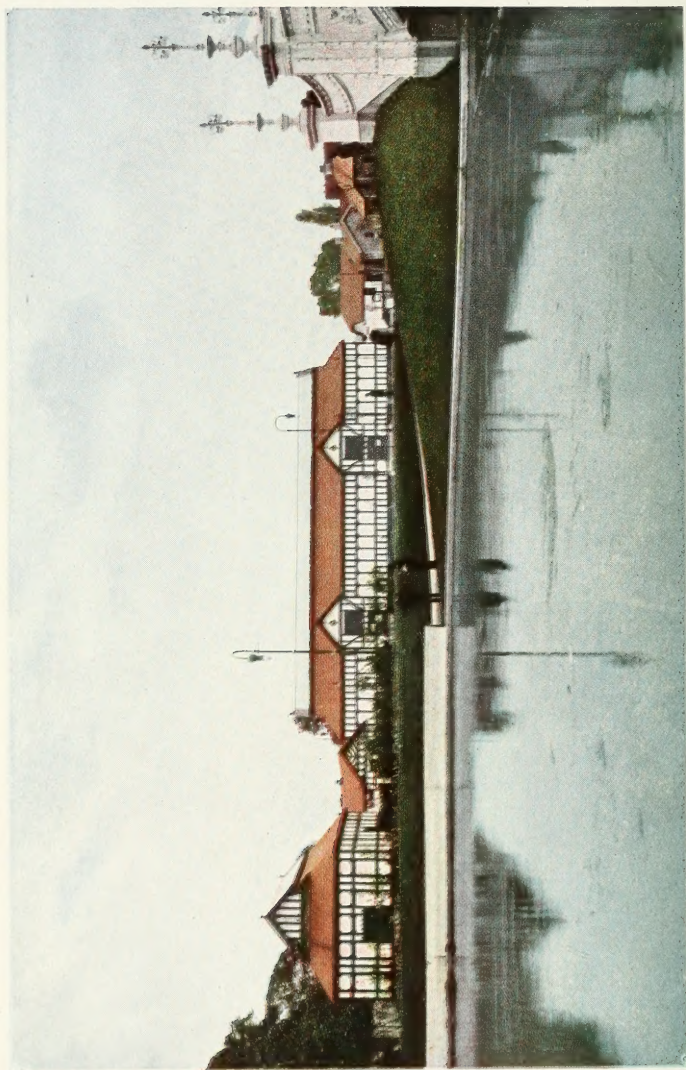
from

Per
3 t

The Estate of the late
James Brehner, LL.D.

and
ons

JOHN BARRINGTON & SONS,
DUBLIN. Limited.



HOME INDUSTRIES SECTION, IRISH INTERNATIONAL EXHIBITION, DUBLIN, 1907.

5cH
I687c

IRISH INTERNATIONAL EXHIBITION, 1907.

HOME INDUSTRIES SECTION.



IRISH RURAL LIFE AND INDUSTRY.

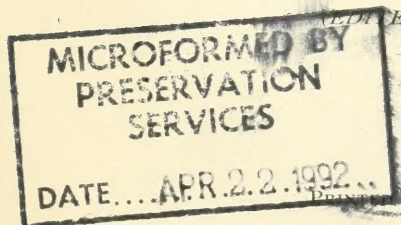
WITH SUGGESTIONS FOR THE FUTURE.

FOREWORD

BY

HER EXCELLENCY THE COUNTESS OF ABERDEEN.

(EDITED BY W.T.M.-F.)



291872
4-10-33

PRINTED AND PUBLISHED BY

HELY'S, LIMITED,

DAME STREET AND ACME WORKS, DAME COURT, DUBLIN.

CONTENTS.

	PAGE
FOREWORD. By Her Excellency the Countess of Aberdeen	xii.
ADDRESS TO HER EXCELLENCY THE COUNTESS OF ABERDEEN	xiii.
OLD IRISH FOLKLORE. By P. W. Joyce, LL.D., M.R.I.A.; Author of "A Social History of Ancient Ireland," etc., etc., etc.	1
LITERATURE IN RURAL IRELAND. By T. W. Rolleston, Joint Editor, "A Treasury of Irish Poetry" ..	9
IRELAND A TOURIST RESORT. By John Cooke, M.A.; Editor, Murray's Hand-book for Ireland, and Wakeman's Hand-book of Irish Antiquities ..	13
IRISH BANDS AND THEIR POSSIBILITIES. By W. J. Butler	23
IRISH TRADITIONAL DANCING. By Dermot O'Brien, R.H.A.	32
HOME INDUSTRIES IN IRELAND A THOUSAND YEARS AGO. By P. W. Joyce, LL.D., M.R.I.A.; Author of "A Social History of Ancient Ireland," etc., etc., etc.	36
RURAL INDUSTRIES AND TRAINING FOR HOME LIFE. By George Fletcher, F.G.S.; Assistant Secretary in respect of Technical Instruction, Department of Agriculture and Technical Instruction for Ireland	46
HOME INDUSTRIES IN OTHER COUNTRIES AND THEIR IMPORTANCE. By the Rev. P. J. Dowling, C.M.	61
THE MACHINE SEWING INDUSTRY IN BELGIUM AND GERMANY. Information specially collected and compiled by the Singer Sewing Machine Co., Ltd.	70
INDUSTRIES CARRIED ON IN FRANCE. Specially secured for the Home Industries Section by Monsieur Lefeuvre Méaulle, Consul for France in Ireland	105
TOY MAKING IN GERMANY. Specially contributed by Filip Kester, Berlin	114
UTILISATION OF POWER FOR SMALL INDUSTRIES. Specially compiled by Crossley Bros., Ltd. ..	121
THE MANUFACTURE OF LACE AND CROCHET IN IRELAND. By R. M. Martin, Managing Director, Irish Lace Depot	128

	PAGE
LACE AND CROCHET MAKING IN THE CONGESTED DISTRICTS OF IRELAND, UNDER THE CONGESTED DISTRICTS BOARD FOR IRELAND	141
HOMESPUN MANUFACTURE IN THE WEST OF IRELAND ..	146
THE MANUFACTURE OF HAND-TUFTED CARPETS IN IRELAND	153
THE WOOLLEN INDUSTRY IN IRELAND	157
HOW A SMALL WOOLLEN FACTORY COULD SUCCEED. By William Cronin	158
HAND-LOOM LINEN, CAMBRIC AND DAMASK WEAVING AND LINEN EMBROIDERY. By W. R. McMurray	162
CONNEMARA CURTAIN MAKING	168
SHIRT MAKING IN LONDONDERRY AND DONEGAL ..	169
A MOUNTAIN PARISH : ITS PAST AND ITS PRESENT ..	170
THE FINE UNDERCLOTHING INDUSTRY IN THE COUNTIES LONDONDERRY AND TYRONE	182
HOSIERY MANUFACTURE IN IRELAND	185
EMBROIDERY AS APPLIED TO HOSIERY. By Thomas E. Hudman	187
BOOTMAKING IN IRELAND	189
STRAW-HAT MAKING IN WEXFORD.	191
GLOVE MAKING IN IRELAND IN THE PAST AND POSSIBILITIES FOR THE FUTURE	193
GLOVE MAKING IN ENGLAND. By H. Urwick ..	194
GLOVE MAKING IN FRANCE. Specially secured for the Home Industries Section by Monsieur Lefevvre Méaulle, Consul for France in Ireland ..	199
THE UTILISATION OF LEATHER, SKIN, FUR, HAIR AND HORN	201
TOOTH-BRUSH MAKING. By R. Addis, Junior ..	204
COMB MAKING IN FRANCE. Specially secured for the Home Industries Section, by Monsieur Lefevvre Méaulle, Consul for France in Ireland ..	211
THE MANUFACTURE OF CUTLERY IN IRELAND ..	214
GOODS IMPORTED INTO IRELAND WHICH MIGHT AFFORD PAYING EMPLOYMENT IN HOMES AND SMALL FACTORIES	216
SCHEME FOR AN IRISH CO-OPERATIVE POTTERY WORKS. By W. P. Rix, Ceramic Specialist.	217
THE ARTS AND CRAFTS SOCIETY OF IRELAND. By G. N. Count Plunkett, V.P., R.I.A. ; V.P., R.S.A.I.	223

	PAGE
ART EMBROIDERY IN IRELAND. By Mrs. Domville (<i>née</i> Beresford)	227
ART METAL WORK AND WOOD CARVING	229
CONNEMARA MARBLE AND PEBBLE CUTTING	232
CO-OPERATION FOR CONGESTION. By R. A. Anderson, Secretary, Irish Agricultural Organisation Society	234
FLAX-GROWING FOR COTTAGERS. By O. W. H. Roulston, B.A.	237
WINTER FLOWER GROWING IN IRELAND FOR THE MARKET. By J. H. Miles	243
BULB FARMING IN IRELAND	246
BEE-KEEPING. By the Rev. J. G. Digges, M.A.; Editor, "Irish Bee Journal," and Author, "Irish Bee Guide."	250
TOBACCO GROWING IN IRELAND. By Colonel N. T. Everard, H.M.L.; President, the Irish Tobacco Growers' Association	256
GARDENING IN SMALL HOLDINGS. By P. Gray, Agricultural Instructor, Albert Agricultural College, Glasnevin	259
COTTAGE GARDENING. By E. Knowldin, F.R.H.S.	263
A VILLAGE HALL: HOW TO HAVE IT, AND HOW TO WORK IT. By the Rev. P. J. Dowling, C.M.	265
A PLEA FOR VILLAGE HALLS. By R. S.	269
VILLAGE HOSPITALS	271
SCHEME FOR THE ESTABLISHMENT OF DISTRICT NURSES IN THE POOREST PARTS OF IRELAND. By The Countess of Dudley	274
MODEL LABOURERS' COTTAGES	281
THE HOUSING OF THE IRISH ARTISAN. By R. Brown	295
WOMEN'S NATIONAL HEALTH ASSOCIATION OF IRELAND	304
CHAMBERS OF COMMERCE AND INDUSTRIAL DEVELOPMENT ASSOCIATIONS	307
HOME INDUSTRIES SECTION	308
CATALOGUE OF INDUSTRIAL SECTION	310
CATALOGUE OF ARTS AND CRAFTS SUB-SECTION	325
LIST OF INDUSTRIES REPRESENTED IN HOME INDUSTRIES SECTION, WITH POSTAL AND TELEGRAPHIC ADDRESSES, AND POSSIBILITIES OF OUT-PUT	350
INDEX TO SECTION	359

LIST OF ILLUSTRATIONS.

Frontispiece—Exterior, Home Industries Section, Irish
International Exhibition.

Ireland a Tourist Resort—	PAGE
The Amphitheatre, Giant's Causeway	15
Cliffs of Moher	17
Pass of Glengesh, Donegal	19
Some Antiquities of Ireland	21
Carrick-a-Rede	22
Irish Bands and their Possibilities—	
Ireland's Own Band	25
Glencree Reformatory School Band	27
Blarney Town Band	29
Home Industries in Ireland a Thousand Years Ago—	
Ancient Irish Spring Brooch	36
Shrine of St. Patrick's Bell	38
Capital "L" from Book of Kells	39
Great Cross of Monasterboice	43
Home Industries in France—	
Esparto Shoemaking, Orolon	69
Dressmaking, Angouleme	69
Machine-sewing Industry in Belgium and Germany—	
Ready-made Clothing, Binche	72
Modern Artisans' Dwellings, Belgium	86
Making Shirts.	88
Toy Making in Germany—	
Making Doll Furniture	114-115
Making Animals	115-116
Making Horses and Wagons	117
Thirty Years a Toy-maker	118
Angel Candlestick	119
Making Toy Pianos	120
Utilization of Power for Small Industries—	
Stationary Oil Engine	121
Portable Oil Engine	123
Producer Plant, suitable for Castlecomer Coal	124-125
Pitmouth, Rock Colliery, Castlecomer	126
Manufacture of Lace and Crochet in Ireland—	
Irish Crochet	129
Irish Flat Needlepoint Dress	131
Rosepoint	132
Rosepoint Lace Workers, New Ross	133
Mrs. Vere O'Brien's Lace Workers	133

	PAGE
Manufacture of Lace and Crochet—	
Limerick Lace Fan—Shamrock, Rose and Thistle	134
The Lace School, Convent of Mercy, Kinsale ..	135
Limerick Lace—Tambour	136
Limerick Lace—Run	137
Appliqué and Guipure Workers, Convent of St. Louis, Carrickmacross	138
Appliqué Collar	139
Lace and Crochet Making in the Congested Districts—	
Creels of Turf	141
The Postman and his Donkey	142
C. D. B. Lace Class, Leenane, with their Excellencies the Lord Lieutenant and Countess of Aberdeen	143
C. D. B. Lace Class, Doohoma. (Photo by Her Excellency the Countess of Aberdeen) ..	144
Group of Lace Workers, Benada	145
Homespun Manufacture in the West of Ireland—	
Preparing Wool, Leenane, Conemara	146
Carding and Spinning, Co. Donegal	147
Weaving Homespuns, Co. Donegal	148
Weavers taking Webs to C. D. B. Depot, Carrick, Co. Donegal	149
Manufacture of Hand-tufted Carpets—	
Morton's Factory, Crolly, Gweedore	153
Interiors of Abbeyleix Factory	155
Dripsey Woollen Mill, Co. Cork	159
Handloom Linen and Damask Weaving—	
Winding Fine Yarn for the Hand-loom.. ..	162
Preparing the Pattern Cards for Damask	163
The Cards which produce the Damask Designs at Ardoyne.. ..	164
A "Clare Embroidery" Frock.. ..	167
Section of Connemara Bedspread	168
A Mountain Parish—	
The Village of Mullaghbawn	170
Slievegullion Mountain	171
Slievegullion Lake, where Milucra disappeared ..	173
Mullaghbawn School as it was, now Slievegullion Shirt Factory	175
Exterior of Slievegullion Shirt Factory	176
Interior of Slievegullion Shirt Factory	177
Cart leaving Factory with Goods for Manchester..	178
The Lancashire Steam Motor Co.'s Motor Lorry, as used in English Country Districts	179
The Bank Committee	180

The Fine Underclothing Industry—	
A Family of Home Workers, Co. Londonderry ..	182
Giving out Work—C. Bayer & Co.'s Station ..	183
Machine Room—C. Bayer & Co.'s Station ..	184
Hosiery Manufacture in Ireland—	
Home Workers Embroidering Balbriggan Hosiery	185
Bandon Hosiery Co.—Machine Room	186
Bandon Hosiery Co.—Wareroom	186
Straw Hat Making in Wexford—	
Some of the Workers	191
An Unique Trade Mark	192
Glove Making in Ireland—	
Gloving School, Tipperary	193
Pair of Limerick Gloves fitting into a Walnut Shell	194
Glove Making in England—	
Glove Making at Home	195
A Sewing Room in Fownes Bros. & Co.'s Factory ..	196
Two Royal Gloves	198
Commercial Utility of the Beast	202
Toothbrush Making—	
Sawing the Bone	204
Fashioning the Handle	205
Smoothing and Polishing the Handle	205
Cutting the Bristles	206
Drawing the Bristles	207
Drilling, Trimming, and Polishing	207
Waxing, Scraping and Washing	208
Sorting and Grading	209
Finishing and Packing	209
Combmaking in France—	
Fashioning by Hand	212
Polishing	213
Scheme for an Irish Co-operative Pottery Works—	
Sketch Design for a Co-operative Pottery ..	218
Co-operative Pottery Ground Plan	220
Model Potter's Cottages	221
A Corner of Arts and Crafts Sub-section	225
Art Metal Work and Woodcarving—	
A Group of Art Metal Workers, Fivemiletown ..	230
Bishop's Chair	231
Top of Trinket Box, inlaid with Connemara Marble ..	233
Flax-growing for Cottagers—	
View of Mill Lane and Top of Water Wheel ..	239

	PAGE
Flax Growing for Cottagers—	
The Mill in Winter	239
Typical Irish Stock, showing Beater	239
General View of Stocks, with Bench	239
The Rollers in an Irish Mill	239
Exterior of Steam Power Mill	241
Scutched Fibre, with Showes removed in process.	241
Water Power Mill, Showes in front	241
Clearing away the Refuse	241
Removing Showes in Cart	241
Bulb Farming in Ireland—	
Field of Darwin Tulips at Rush, Co. Dublin ..	247
Packing Irish-grown Bulbs for Export	249
Bee-keeping—	
The Industry at Kiltyclogher, Co. Leitrim ..	250
Examining Candidates for Experts' Certificates ..	252
A Model Apiary in Co. Armagh	252
Lady Bee-keepers	253
A Successful Bee-keeper	254
Tobacco Growing in Ireland—	
A Corner of Randlestown Tobacco Farm ..	256
Bringing in Irish Tobacco to the Barn	257
An Irish Tobacco Barn	258
An English Village Hall	269
Lady Dudley's Nursing Scheme—	
Nurse Brady, Co. Donegal	274
Nurse Loughrey, Mallinmore, Co. Donegal ..	275
Nurse Kavanagh, Arranmore Island, Co. Donegal	275
A Co. Mayo Dwelling	276
The Home of a Patient	276
Nurse Cusack, Co. Galway	277
Nurse on Tour, Co. Galway	277
A House on Inishnee Island, Co. Galway ..	278
A Co. Galway Patient	278
Nurse Walshe at Glengariff, Co. Cork	279
A Co. Kerry Dwelling	279
Model Labourers' Cottages—	
What the Model Labourers' Cottages are intended to replace	281
The Housing of the Irish Artisan—	
Model Artisans' Dwellings at Donaghmore ..	295
Ideal Artisan's Cottage	297-299
Interior of Artisan's Cottage	300-301
Looms	320
Gloving in Tipperary	321

MAPS AND PLANS.

Lace and Crochet Industry Map	Facing Page 128
Hand-tufted Carpets and Rugs and Homespun Map	146
Woollen Factories Map	157
Linen and Damask Map	162
Shirt Making Map	169
Hosiery Industry and Boot Factories Map	185
Agricultural Credit Societies Map	234
Flax Crop Map	237
Bee-keeping Industry Map	250
Tobacco Culture Map	256
Plan of Village Hall	Page 266
Plan of Village Hospital	272
Map showing location of Lady Dudley's Nurses	Facing Page 274
Model Plans for Labourers' Cottages, Design A	Page 282
Ground Plan of Design A	283
Model Plans for Labourers' Cottages, Design B	284
Ground Plan of Design B	285
Model Plans for Labourers' Cottages, Design C	286
Ground Plan of Design C	287
Model Plans for Labourers' Cottages, Design D	288
Ground Plan of Design D	289
Chambers of Commerce and Industrial Development Associations Map	Facing Page 307
Plan of Home Industries Section	308
Plan of Large Industrial Hall	309
Plan of Arts and Crafts Sub-section	Page 326



FOREWORD.

THE writers of the Papers in this Handbook need no introduction from anyone to an Irish public, but I venture, as President of the Home Industries Section of the Irish International Exhibition of 1907, to commend to the notice of our visitors the consideration of the subjects dealt with.

The Papers do not profess to do more than call attention to some of the questions touching the life of Rural Ireland and to some of the influences affecting its welfare.

They seek to carry out the idea of the Committee in charge of the Home Industries Section, which was, not to gather together an exhaustive representation of Irish Home Industries (which indeed would have been impossible in the space we had at our disposal), but to select specimens which would draw attention to the various *types* of industries now carried on in country districts, and to others which might be established or developed.

We might easily have crowded our cases with many more exhibits, we might have greatly increased the number of our exhibitors, we might have included only the very best and most perfect specimens extant of each industry.

But this was not our object.

Our great wish and hope is that by presenting a series of well-arranged and attractive exhibits produced by the skill of trained cottage workers who have been supplied with good designs, and who have been brought into touch with the demands of the market, visitors would be led to think of how much more could be done, and whether *they* could not help in the doing of it.

It is a pity that we could not have preserved the collection of Home Industries Exhibits sent to the International Exhibition at Edinburgh, twenty-one years ago, to place alongside of the goods we are now able to display, and thus to have illustrated the progress made, and to have encouraged those who have patiently worked in this movement during all the intervening years.

We have great hopes that this Section may so appeal to the imagination of visitors, that it may bear a worthy part in the present great revival of public interest in the development of Irish Industries.

It is not within our scope to do more than just touch on some of the larger manufacturing industries which we all fervently desire to see established in Ireland, but we can ask our readers to consider what would be the trans'ormation if we could find in every parish in Ireland,

Subsidiary Industries which can be carried on at home ;

Cottages designed for the comfort, health and convenience of their inhabitants ;

A miniature Cottage Hospital where emergency cases could be treated, and from which district nurses could carry on their ministrations ;

A Village Hall which could be made the centre of social life, and where all manner of gatherings could be held for the education and the amusement of the people, quickening their interest in music and art and literature, as well as in industrial questions ;

And, a public thoroughly alive to the importance both of encouraging native industries and of caring for the education and the health of the people.

And may we suggest, as a first step, that they should join and support one or more of the Associations dealing with these questions, such as the R.I.I.A., 76 Grafton Street, which has been at work since 1886 ; or one of the Irish Industrial Associations established in various centres and doing such excellent work ; or the Arts and Crafts Society, the Art Companions. Or, again, in another direction, the Anti-Tuberculosis Society, the Women's National Health Association of Ireland, the Queen Victoria Jubilee Institute for Nurses, or the scheme instituted by Lady Dudley for establishing nurses in the poorest parts of Ireland, the work of which is described in these pages.

There are many other organisations working in similar directions, but the above occur to me as especially bearing on country life in Ireland.

May this book fulfil its mission of inciting its readers to *do* as well as to *think* !

Isabel Alderson

Vice-Regal Lodge,
June, 1907.

Opening of the Home Industries Section,

June 1st, 1907.

THE ceremony of opening the Section was performed by the Countess of Aberdeen, to whom the following Address was presented by the Committee together with an Irish Silver Fruit Casket as a memento of the occasion.

ADDRESS.

MAY IT PLEASE YOUR EXCELLENCY,

The event which takes place to-day is one of great significance and, we hope, of happy augury. For the first time on Irish soil we see, as a most attractive feature of a great International Exhibition, a display of those Home Industries which are gradually assuming such importance in the life of every people. There is also to be seen an Educational Section of supreme importance, in which all who are working for the betterment of their countrymen can behold ideas to work towards, in industries, housing, developing, the recreative side of country life, and bringing the advantages of modern hygiene to the bedside of the sick. All these exhibits conjointly form a display which might be placed in any of the great Exhibitions of the world, and win honour for the land of its production.

The Executive feel that such an occasion should not pass without making known their sense of indebtedness to Your Excellency. Since you first arrived in Ireland you have bestowed on our industrial efforts a patronage which has been productive of the highest good. The gratifying revival and development of the Lace Industry may be given as a noteworthy example amongst many such.

Your name has been already associated with Irish industrial displays in various centres, particularly that of Chicago, but we trust that in this Section your patronage may be crowned with the greatest possible success. It has not been an idle patronage. The Section may be said to have started on the road to real success as soon as you became its President. Some of the most conspicuous features are due to your direct suggestion, and in everything your personal interest and efforts were an abiding incentive, moving all to give their best work to the undertaking.

We, therefore, take this occasion of publicly expressing the great debt the Committee of this Section owes to your

Excellency, and of uttering the cordial hope that for many years we may enjoy your presence as a sympathetic tie and effective helper in the cause of Irish Industries.

Her Excellency, in reply, said :—

Father Dowling and Members of the Committee—In reply to the very kindly address which you have been good enough to present to me, let me congratulate you with all my heart on the completion of this Section, which we hope will do much to demonstrate the great advance that has been made in recent years in the variety, design and execution of Irish Home Industries, and their strong claim to the support of all who love Ireland. The presence of representative workers plying their trades, showing various stages of progress, as in the case of looms you will see employed, and that, too, in close juxtaposition to cases of finished goods, will inevitably awaken the imaginations of our visitors to consider what the cultivation of these home industries mean in homes where the means of subsistence are very scanty. All these supplemental industries which are or can be carried on in the homes of the workers, such as the making of lace and crochet embroidery, the weaving of homespuns, the raising of poultry or bees, or the cultivation of early flowers and vegetables, have a peculiar interest, inasmuch as they cannot fail to have a great influence on the lives and characters of those who cultivate them, training them in divers ways, and imbuing them with new hopes and ambitions, as they begin to realise the results of their labours (hear, hear). This increase of hopefulness amongst the workers is one of the chief changes for good which I could not fail to note on returning to Ireland after an absence of several years—this, together with the great increase of general interest in native productions and a genuine desire to use them and encourage them makes the work of all industrial associations much easier than in days gone by (hear, hear). The material results we see in such figures as those which show that the output of lace and crochet from Ireland is about eight times as great as it was twenty years ago, and which also show a very great increase in the sale of tweeds and homespuns, which you will see exhibited in the Hall behind me (applause). It is a joy to me that so many of my old friends and fellow-workers from our Industries Association should have come forward to take charge of this Section, together with the representatives of the Public Departments who have helped us to carry it out. I know you will wish me to express in your name our hearty thanks to the Exhibition authorities, who have so cordially supported our efforts, and who have met our wishes in every

way in their power. You will also wish me to express our special thanks to the Department for putting at our disposition the valuable services of Mr. W. Macartney-Filgate, who has laboured in season and out of season, and who has given much of his own time and leisure towards making this Section a success (hear, hear). As for my own share in the work of preparation, to which you are good enough to allude, the less said the better, for I have been a sad truant, though a most unwilling one during the months when I should have been working with you ("No, no"). But this fact makes me all the more free to appeal to the general public to come to this Section, and to ponder over its significance in relation to rural life in Ireland (hear, hear). Look at the labourers' cottages, for instance. You may approve of their plan and their appearance or you may not, but at least they give a basis for discussion, and they prove that dwellings of that description can be erected anywhere in Ireland for £135 apiece. Look at the Village Hall, and look ahead a bit, and see the time when a building of this description will be considered a necessity in every village in Ireland, giving opportunities for social life and recreation, music, and lectures and conferences such as we hope to use our hall here for too. Look at our little emergency hospital, too, and consider the comfort and help that such an institution could be in outlying parts of Ireland, allowing the district nurses to be sent out in couples instead of singly as at present, and giving the medical men of the district the opportunity of having their serious cases under observation and carefully nursed. There is another exhibit to which I should like to draw special attention, and that is one indicating how we may hope that in the near future we may see schemes formulated whereby motive power can be rendered available for village trades, thereby revolutionising country life and its possibilities. And this Village Green which you, ladies and gentlemen, have inaugurated to-day, we hope to use for village sports, for contests of village bands, for Irish dances and the like. You may find numberless omissions in our home industries—you may think of many features we might have included, but the fact remains that you will find here the germs of many ideas for uplifting and beautifying country life in Ireland, even in its most outlying parts, indicating how supplemental industries can be made profitable, and demonstrating what has already been done by workers where natural quickness gives them a great advantage when trained and put in touch with the demands of the world's market (applause). May we then venture to appeal to our visitors to help to make this Home Industries Section a success beyond our most sanguine

expectation ? They can do so if they will. They can note the exhibits and see where they are made, and they can ask their tradesmen to supply them with these articles or other similar ones of Irish make—and they can do this without being unfashionable nowadays ! And they can teach, according to their opportunity, help some Irish industry to develop, and try to brighten and help some country district by promoting its efforts to help itself. I am sure at least that you, ladies and gentlemen, will co-operate with us and give us a good start by speaking favourably of our attempts. Again, Father Dowling, let me thank you and the members of this Sectional Committee very warmly. It is a very great pleasure to me to be President of this Section.

Subsequently His Excellency the Lord Lieutenant visited the Section, driving to the Exhibition in semi-state for the purpose. The visitors who had assembled for the occasion were accommodated in the Village Hall, and His Excellency delivered a short address congratulating the Committee on the result of their work and laying stress on the importance of encouraging and developing all home industries.





IRISH RURAL LIFE AND INDUSTRY.

OLD IRISH FOLKLORE.

By P. W. JOYCE, LL.D., M.R.I.A.

Author of "A SOCIAL HISTORY OF ANCIENT IRELAND," etc., etc., etc.



FOLKLORE stories are found among the people of all countries. Many—perhaps most—pass from father to son, from mouth to mouth, for generations, without ever being written down. But the best and most important of them—among civilised nations—are seized on by scholars of taste and discernment and committed to writing, and often made the bases of further literary developments. Among the Greeks, their written folklore formed a large part of the intellectual life of the people. To mention one example out of many, the *Odyssey* is, from beginning to end, a collection of folklore stories.

It was the same among the Irish. Their stories began to be written down, when writing became general, *i.e.*, in the seventh or eighth century, and from that period forward they continued to be committed to manuscript books, till a great body of romantic and historical written literature accumulated, consisting chiefly of prose tales. They are contained in our old manuscripts, from the *Book of the Dun Cow* and the *Book of Leinster* downwards.

Although a vast number of our old manuscript books were destroyed during times of war, yet we have remaining something like 600 folk-tales in our existing manuscripts, of which only about 150 have been rendered accessible to the general public by translation. But these hundred and fifty are, generally, the best.

Some of our old classical folk-stories relate to the Irish pagan gods, such as *Mannanan Mac Lir* the sea god, corresponding with the Greek *Neptune*, *Goibniu* the smith god, like the Greek and Latin *Hephaestus* or *Vulcan*, *Brigit* the Goddess of Medicine, *Aengus Mac-in-Og* the mighty enchanter who had his glorious palace under the Great Mound of New Grange

on the Boyne : and soforth. These stories correspond with many of the mythological stories of the Greeks, embalmed in the pages of Homer, Hesiod, and other old Greek classical writers. But by far the greatest number of our folklore tales relate to men and women—stories of human transactions—Battles, Sieges, Voyages, Tragedies, Cattle raids, Courtships, and soforth.

Some of the Irish folk-tales are historical, *i.e.*, founded on historical events—history embellished with some fiction : while others are altogether fictitious—creations of the imagination, but always woven round historical personages. From this great body of stories it would be easy to select a large number, powerful in conception and execution, very beautiful, high and dignified in tone and feeling, many of them worthy to rank with the best literature of their kind in any language. The stories of the Sons of Usna, the Children of Lir, the Fingal Ronain, the Voyage of Maeldune, The Voyage of the Sons of O'Corra, Da Derga's Hostel, The Pursuit of Dermot and Grania, the Boroma, and the Fairy Palace of the Quicken Trees—all of which have been published with translations—are only a few instances in point. And it would be easy to name many others if our space permitted.

The country round Armagh, and the mountainous Peninsula of Carlingford (with Greenore at its extreme point) are classic lands in Irish Folklore. Two miles from Armagh is situated "The Navan Ring or Fort," with its majestic mounds and circumvallations, which is what remains of Emain, King Conobar's palace and the resort of the Red Branch Knights in the first century. The Carlingford Peninsula, with the adjacent level district in North Louth, was the Principality of Cuculainn, the great leader of the Red Branch Knights, the mightiest champion of all the folklore heroes of Ireland.

In no other country in Europe are there so many places identified with classic folklore as in Ireland, and if, in tourist and guide books, these associations were pointed out, and the several folk-tales abridged in connection with the localities, it would add greatly to the attractiveness of the places, and encourage visitors to come and see the old scenes for themselves.

Many of the superstitions we find mentioned in Irish folklore of the present day have come down from pagan times, and are of course of pagan origin. In those old times, the people, high and low, had many strange beliefs, which served them in a way instead of a connected system of religion. Among the following illustrations a few of these are referred to, some of which may still be found lurking among the people, though with less firm faith than prevailed among the pagans.

As to the longer Irish classical folk-stories, it would be impossible to give illustrations here : but a few of the shorter narratives of deeds, incidents, beliefs, and superstitions, will be selected as examples.

Before the general spread of Christianity in Ireland the Irish Druids could drive people mad by their sorcery, a power which was much dreaded by the people in general. For this purpose the druid prepared what was called a ' madman's wisp', that is, a little wisp of straw or grass, into which he pronounced some foul, baleful verses ; and, watching his opportunity, he flung it into the face of the poor victim, who straightway became a madman, or, what was just as bad, an idiot—all beyond cure.

There was a most curious belief that during the paroxysm of insanity, a madman's body became as light as air, so that, as he ran distractedly, he scarcely touched the ground, or he rose into the air, still speeding on with a sort of fluttering motion. This was especially the case when madness was produced by the rage of battle. For, during a bloody battle, it sometimes happened that an excitable combatant ran mad with fury and horror. In one great battle fought thirteen centuries ago, a brave young warrior named Sweeny became distracted with the horrors he witnessed, and imagining he saw battle-demons hovering and shrieking overhead, he suddenly bounded off the earth, and alighted on the boss of another warrior's shield, from which, after a moment, he leaped up again ; and so he continued flitting and bounding on the shields and helmet-crests of the combatants and on the tops of the neighbouring trees, till he finally fled from the field ; after which he wandered round Ireland, a madman or the rest of his life.

Not far from Tralee in Kerry there is a beautiful valley called " Glannagalt," which means the valley of the lunatics ; and it was believed not only in Kerry, but over the whole of Ireland, wherever the glen was known, that all lunatics, no matter in what part of the country, would ultimately, if left to themselves, find their way to this glen to be cured. There are two wells in the glen, called Tobernagalt, the lunatics' well, to which the mad people always make their way ; and they drink of the healing waters, and eat some of the cresses that grow on the margin ;—the water and the cress, and the secret virtue of the valley will restore the poor wanderers to sanity.

On one occasion, an Irish champion named Fergoman, during an excursion in the district now called Donegal, came across a litter of young pigs, and thoughtlessly killed them all. On his return journey he passed by the same spot, which was on the shore of Lough Finn, where he saw an enormous wild

sow, the mother of the brood, standing over their bodies. She immediately rushed on him to revenge their death, and a furious fight began, the sow using her tusks, the warrior his spear.

Fergoman had a sister named Finna, who was as warlike as himself; and after long fighting, when he was lacerated by the sow's tusks and in danger of death, he raised a great shout for his sister's help. She happened to be standing at the same side of the lake, but she heard the echo of the shout from the cliffs on the opposite side; she immediately plunged in, and swam across, but as she reached the shore, the voice came from the side she had left, and when she returned, the echo came resounding again from the opposite cliffs. And so she crossed and recrossed, till the dreadful dying shouts of Fergoman so overwhelmed her with grief and terror, that she sank in the middle of the lake and was drowned. Hence it was called the Lake of Finn or Finna, and gave also its name to the river Finn.

It is extraordinary how the memory of the old pagan worship of fairies has come down to our time in numberless superstitions and folklore stories; and the reader will hardly need to be reminded that these old beliefs are also perpetuated by Shakespeare in "*A Midsummer Night's Dream*."

The fairies dwelt under pleasant green little hills; and there they built themselves palaces all ablaze with light, and glittering with gems and gold. Many of the old fairy hills all over the country are still well known; and to this day there is a superstition among many of the people that the fairies still remain in them, and that they also dwell in the old *lisses*, *raths*, or forts that are found everywhere in Ireland. The fairies were not always confined to their dwellings: they often got out, but they were generally invisible. Whenever they made themselves visible to mortals—and that was only seldom—they were seen to be very small, hardly the height of a man's knee. People had to be careful of them, for they often did mischief when interfered with.

When you see a little whirl of dust moving along the road on a fine calm day; that is a troop of fairies travelling on the wind from one old fort to another: and it will be well to step aside and let them pass. Accordingly the people call such a whirl a "*shee-geeha*," meaning "*wind-fairies*."

We have many kinds of fairies, all with different names, some harmless, merry, and good-natured, some malignant and dangerous: but our space will permit us to name only two or three here.

The Pooka is an odd mixture of merriment and malignity; and his exploits form the subject of innumerable legendary narratives. Under the name of Puck, he will be recognised

as the "merry wanderer of the night," who boasts that he can "put a girdle round about the earth in forty minutes;" and the genius of Shakspeare has conferred on him a kind of immortality he never expected.

There are many places all over Ireland where the Pooka is still well remembered, and where, though he has himself forsaken his haunts, he has left his name to attest his former reign of terror. Some of these places are notorious even to this day for fatal accidents, all attributed to the malice of the goblin for the disturbance of his "ancient solitary reign." One of the best known is Pollaphuca in Wicklow, a wild chasm where the Liffey falls over a ledge of rocks into a deep pool, to which the name properly belongs, signifying the pool or hole of the Pooka. Here, as well as at Ahaphuca ("sprite-ford," as it is sometimes correctly translated) near Mitchelstown in Cork, many a wayfarer lost his life in time of flood, before the bridges were built.

We have the Sheevra, a very dangerous fairy. The druids were so enraged with the great King Cormac Mac Art, sixteen centuries ago, for his leanings towards Christianity, that they set sheevras on him, who caused him to be choked with a bone of a salmon, while eating his dinner.

Perhaps the best known of all fairies is the Leprechaun, a lively little fellow, six inches or a foot in height, the merry sprite "Whom maids at night, Oft meet in glen that's haunted," who will give you an inexhaustible fairy purse of gold if you can only manage to hold him spell-bound by an uninterrupted gaze. But if you take your eyes off him for an instant, he is off—laughing at you for your simplicity. It is very hard to catch a Leprechaun, and still harder to hold him; for he is tricky, and will invent all sorts of excuses to make you look round. He is usually dressed in a green coat with red cap and knee-breeches; his employment is making shoes for the fairies; and he would give his eyes for a drink of pottheen whiskey (or as we call it "mountain dew") out of a *cruiskeen* or little jar. As we have said so much about him in prose, let us see how he looks in verse:—

THE LEPRECHAUN.

In a shady nook one moonlight night
 A Leprechaun I spied,
 With scarlet cap and coat of green,
 A cruiskeen by his side.
 'Twas tick, tack, tick, his hammer went
 Upon a weeny shoe;
 And I laughed to think of a purse of gold
 But the fairy was laughing too.

With tip-toe step and beating heart,
Quite softly I drew nigh :
There was mischief in his merry face ;—
A twinkle in his eye.
He hammered and sang with tiny voice,
And drank his mountain dew ;
And I laughed to think he was caught at last —
But the fairy was laughing too !

As quick at thought I seized the elf ;
“ Your fairy purse ! ” I cried ;
“ The purse ! ” he said—“ ’tis in her hand—
That lady at your side ! ”
I turned to look : the elf was off !
Then what was I to do ?
O, I laughed to think what a fool I’d been ;
And the fairy was laughing too !

The legend that gave name to Loop Head in Clare is still well remembered by the people. The mighty hero Cuculainn, endeavouring once to escape from an enraged woman by whom he was pursued, made his way southwards to the extremity of the county of Clare, where he unhappily found himself in a *cul-de-sac*, with the furious termagant just behind him. Springing from a projecting point he alighted with a great bound on an isolated rock, which still stands there, about 25 feet out from the mainland. The woman, nothing daunted by the raging chasm, sprang after him : when, exerting all his strength, he leaped back again to the mainland—a much more difficult feat than the first—and his pursuer, attempting to follow him, fell short into the boiling sea. Hence the cape was called “ Loop Head,” that is Leap Head.

Some of the druids were water-diviners ; but they employed other means besides the forked stick. Once, during a war between King Cormac Mac Art and the King of Munster, sixteen hundred years ago, Cormac’s druids dried up, by their incantations, the springs, lakes, and rivers of the district, so that the men and horses of the Munster army were dying of thirst. The King of Munster, in this great distress, sent for Mow-Rih, the most celebrated druid of his time, who lived at Darrery, now Valentia island in Kerry ; and he came, and the men of Munster besought him to relieve them from the plague of thirst

Mow-Rih called for his disciple Canvore, and said to him, “ Bring me my magical spear : ” and his magical spear was brought, and he cast it high in the air, and told Canvore to

dig up the ground where it fell. "What shall be my reward?" said Canvore. "Your name shall be for ever on the stream," said Mow-Rih. Then Canvore dug the ground, and the living water burst asunder the spells that bound it, and gushed forth from the earth, in a great stream: and the multitudes of men and horses and cattle threw themselves upon it, and drank till they were satisfied. Cormac was then attacked with renewed vigour, and his army routed with great slaughter.

Canvore received his reward honourably: for the fine well is still there—between Kilfinane and Knocklong in the Co. Limerick—and it is universally known by the name Tober-Canvore, Canvore's Well.

Many of the old Irish ideas and folklore stories are purely Christian. Hell was deep under the earth, and is represented in some documents as fiery hot: in others, as intolerably cold: and often both, *i.e.*, hot in one part and cold in another: reminding one of Milton's description of the damned as passing "o'er many a frozen, many a fiery alp." In some cases the damned were freed from their tortures every Sunday, or their punishment was mitigated.

The devil could take a variety of shapes as it suited his purpose: but, when in his own natural form and character, the legends represent him much as he appears in the popular notions of the present day. He once paid a visit in disguise to St. Molling (6th century), who soon discovered who he was, and recommended him to go on his knees and pray:—"Ah," said he, "I am not able to kneel down, for my knees are at the back of my legs." A legend in the Irish Life of St. Brigit relates that the devil once ventured into the refectory where the saint and her nuns were at dinner. But Brigit miraculously rendered him visible, when he appeared beside the table "with his head down and his feet up, while smoke "and flames issued from his gullet and nostrils"—to the great terror of those nuns who saw him. St. Columkille, walking once with some companions, met the devil disguised as a respectable-looking gentleman; and not knowing at first who he was, fell into conversation with him. After an agreeable chat, the gentleman challenged the saint to a trial of poetical skill, and propounded the first lines of several hard old *ranns*, or verses, with a demand that the saint should repeat the rest. But Columkille correctly completed them in every case. It was now the saint's turn, and he recited some devotional half verses which puzzled and silenced Satan—who was not well versed in that sort of literature—and what was worse, showed up who he was plainly in sight of all; so that he became quite ashamed of himself, and sneaked off with his tail between his legs.

We are told in a legend in the "Second Vision of Adaman," that the soul, on parting from the body, visits four places before setting out for its final destination—the place of its birth, the place of its death, and place of its baptism, and the place of its burial. According to this, the pathetic wish of the poor old Irishwoman who recently lay dying in Liverpool was granted. Just with her last breath she begged to know from the Irish priest who shrived her whether God would permit her to pass through Ireland on her way to heaven.

Human souls, as well as angels and demons, often took the shape of birds : those of the good were white and beautiful ; while wicked souls and demons often appeared as ravens or other sooty-looking birds of ill-omen. A chief function of the angels who attend directly on God is to chant music of ineffable sweetness to Him, which they do generally in the shape of beautiful white birds.

While St. Patrick was journeying through Connaught, he retired, on the approach of Lent, to the wilderness of Croghan Acla, the well-known mountain now called Croagh Patrick in Mayo, overhanging Clew Bay. On this mountain he spent the whole forty days of Lent, after the manner of Moses on Mount Sinai ; and his bed was a flat stone, with four stones placed round him for shelter.

When now it was coming nigh to Easter Sunday, vast numbers of demons in the shape of great black birds, loathsome and fierce-looking, came to the mountain from the four quarters of the sky to assail him : and they flew round him in clouds so as to hide both the heavens and the earth from his view. He prayed fervently, and sang hymns, to curse and banish them ; but they heeded neither prayer nor curse, and for many days and nights they kept flapping their hateful sooty wings around him, nearer and nearer, giving him no rest. Then, at last becoming alarmed and exasperated, he rang his bell, so that it was heard throughout all Erin : and in the end flung it among them with such violence that he broke a gap in its side, on which the whole hellish brood flew away and left the mountain clear. And now that he was freed from their attacks, the Saint sank down, overcome in mind and body after his long and fearful struggle ; and he wept, wept so much that his chasuble was all wet with his tears. But presently an angel came to comfort him, bringing a number of beautiful white birds. And when he had spoken word of consolation, and dried the chasuble, the birds sang music so sweet and joyous that Patrick quite forgot all the agony he had suffered from the demons, and again became cheerful and happy. And after that day no demon came into Erin for seven years, seven months, seven days, and seven nights.

Literature in Rural Ireland.

By T. W. ROLLESTON.

Joint Editor, "A TREASURY OF IRISH POETRY."

IT seems a characteristic of the Irish people to hold their intellectual gifts and qualities rather in a state of diffusion than in one of concentration. The results of this idiosyncrasy have often struck outsiders as a medley of contradictions. Thus, in a country justly notable for its keen appreciation of the humorous side of life, visitors are surprised not to find any comic journalism of high distinction. So it is with another gift of the race—the gift of music. No country in the world has so rich and beautiful a folk-music, but we have never produced a great composer, and foreign musicians resident in the country usually carry off the more important prizes at our *Feis Ceoil*. There is no real contradiction or puzzle in all this. It is by no means necessary, in logic or in life, that gifts widely diffused among a people should also find expression in works of concentrated force and brilliance. They may, or they may not. We must always remember that Nature has not said her last word about Ireland and Irish genius. She has barely begun to say her first; and the nation which succeeded the ancient Celtic clans is still in process of formation. Let us trust our destiny, and give it time. Nature will see to it that the work she fosters does not perish.

Irish literature, looked at as a whole, comes out very true to the type of Irish music and Irish wit. We have not produced Shakespeares or Goethes, but on the other hand neither England nor Germany has produced anything like our host of peasant poets, who have carried the sacred fire right through the veins of a whole people. These poets wrote in Gaelic. The conquering flood of English swept over them about the beginning of the nineteenth century, and the peasant literature thenceforth became greatly diminished and greatly debased; for you cannot with impunity tear the mind of a people out of its native soil and plant it in another. But much of the work of the seventeenth and eighteenth century poets has survived the neglect or hostility which were its lot to endure for a hundred years, and this work is now being re-discovered, studied, and edited by many diligent and enthusiastic workers, who are thus laying bare a striking and hitherto unknown chapter in the history of the Irish intellect. Innumerable manuscripts have been totally lost; many writers, once of high repute, are now known by name only, and often, doubt-

less, not even by name. But enough of this literature has been brought to light to show that before the period of unintelligent Anglicization, poetry was a most real and active force all through rural Ireland. A strong local feeling characterised it. There were "schools" of poetry attaching themselves to special localities, as in the beautiful district of Adare, in Co. Limerick. Probably no county in Ireland, outside the Pale, was without its bard, or group of bards, and their work is marked by an intense love, not only of their country, but of their native spot and the friends and neighbours dwelling in it. One of the master passions of the Irish mind is expressed in two moving and beautiful lines of an old Connacht fiddler :—

*Ós b'áirde arís mé i gceart lán mo ádame
 'n' mteóad an aoir tóim, a' b'íonn arís ós.

It seems but yesterday that the very names of these rural bards of the last days of Irish Ireland were totally unknown except to a few students and *shanachies*. Owen O'Sullivan the Red, Egan O'Rahilly, Teague the Gael, John MacDonnell, Donough Macnamara, Raftery—who knew or cared anything about them? Thanks to Dr. Hyde and other writers—thanks above all to the devoted labours of Father Dineen, who never can be named in this connexion without admiration and gratitude—we now have their poems carefully collected and sifted from long-neglected MSS. or from the lips of peasant reciters, edited and printed with translations, vocabularies, and biographical notices. A whole buried literature is thus coming to light. It is a literature which reflected faithfully the thought, the interests, the way of life, the religion, of the Irish people of the time, for the men who wrote it were among and of the people. Let O'Rahilly, whose works have lately been brought out by the Irish Texts Society, stand as a type of his class. We see him a rude, frieze-coated figure, girt with a straw rope, moving about from fair to fair, or sometimes lodging for a while under the hospitality of some patron who still preserved the means of showing kindness to an Irish bard. He observed keenly the men and manners of his time, and recorded what he saw and what he felt in lyrics, dirges, satires, "visions," often of lofty beauty and noble feeling, and always showing an extraordinary mastery of metrical structure and music. He is intensely patriotic, but a keen critic of his countrymen's failings. Devoted to the old aristocracy of Ireland, he hates the Cromwellian not only as an oppressor but as a boor;

*Set me back, right in the midst of my own folk, and old age would quit me; I should be a young man again.

but with all his hatred and anger his mind is a sincere and candid one. He admits that Cromwell "gave plenty to the man with the scythe," though he turned the heir of the house adrift to seek his bread. O'Rahilly is, of course, an ardent Jacobite, and set all his hopes on the return in triumph of the "Merchant's Son," the young Prince Charlie. It will be evident, even from this very brief sketch, that we have here a man of fine gifts and qualities, in whom the mind of his country found a voice. A country is in a sad state when it finds no such voices to express its life, to ennoble its emotion, and lift familiar scenes and persons into the light of the ideal.

The meaning of what is called the Celtic Revival in the present day is that Ireland is finding these voices once more. Some enthusiasts would limit this reference strictly to those who write in the Irish language. I cannot at all agree with this limitation. Literature written for the Irish people is Irish literature, and to-day it must of necessity be largely written in English. How it may be to-morrow, who can tell? But those who work to-day must accept the conditions of to-day, and Ferguson, O'Grady, Yeats, and A.E., are not less truly contributors to the new Irish literary impulse than are Father O'Leary, Torna and Conan Maol. Out of all of them it is possible to read something of the spiritual physiognomy of modern Ireland. They are re-making the Irish nation, and giving it a typical form and individuality.

A striking and interesting feature of this movement is its addiction to the drama. Here we have something quite new in Ireland, for neither in the antique nor in the Elizabethan nor the Jacobite literature of Ireland, in spite of an abundant dramatic spirit, is there any emergence of the dramatic form. Mr. Yeats seems to have been the first to divine that this was what the new literature needed, and his "Literary Theatre" enterprise of some ten years ago gave the first impulse to the modern Irish drama. It is fortunate that this impulse persisted and fructified in spite of much discouragement and some serious mistakes, for nothing can ever take the place of the drama as a training in literary expression. It seems almost essential that a nation which is to do great things in literature must pass through that severe and fortifying discipline. As Mr. Yeats started the dramatic movement with plays in English, his own and others, so it was, I think, Dr. Douglas Hyde who led the way in Gaelic. His plays are mostly little one-scene dramas, making small demands in the way of scenery or of a large company of actors, and written in language of extreme simplicity. He takes simple episodes or legends of rural life,

like the stratagem by which a wandering poet is lured out of the house of a girl to whom he is paying attentions which scandalize her relatives, or the exquisite tale of the beggar saint who helps a heartbroken little lad over his lessons in the wayside school; he fills them with tears and laughter, with a strong but delicate charm, and he has revealed through them the romance and vivacity of Irish peasant life in a far more authentic style than any writer in English has hitherto succeeded in doing. Mr. Yeats and Dr. Hyde, between them, they, and the spirit of the time, have set all literary Ireland writing plays, and all over the country, in remote western villages as well as in Dublin, companies have been formed to act them, and a remarkable amount of acting talent has been discovered. These plays are on all sorts of subjects, conceived and treated in the most varied way. Mr. Standish O'Grady has written fine dramatic pageants and masques which lend themselves nobly to open-air representation. His "Masque of Finn" was first performed in the grounds of the Viceregal Lodge in 1906, and his "Red Hugh" was admirably given a few years ago at Sheestown Lodge, on the Nore, by a company of Belfast lads, trained by Mr. F. J. Bigger. Mr. John Synge has produced at the Abbey Theatre comedies full or sombre satire, portraying the spirit of freedom and beauty struggling with the gloom and inertia. Lady Gregory has written delightful farces, and Mr. Yeats has even added a success in this genre to his stately dramatic romances. Mr. Padraic Colum's plays of peasant life show a singular union of simplicity of expression and subtlety of thought which places him in the first rank of the writers drawn forth by the new dramatic movement. In Gaelic, Dr. Hyde's plays still remain, to my mind, the best yet produced. Few others show his mastery of construction, and few trust themselves to make an appeal on literary and artistic grounds alone. But the Gaelic language is, as I have said, without models in this province of literature, and its drama has to be created from the beginning. At present it runs largely to historic subjects and to satire, the latter often very effective and amusing as in the well-known Tawin play *An Dochtúir*, the spontaneous production of a group of native Irish speakers in the County Galway.

The point of all this is that the Irish people are again learning to charm and to amuse themselves by products racy of their nation and soil. It is not a movement confined to the towns or to the educated classes. As in rustic Greece, before the rise of the great Attic drama, the villages are becoming centres of dramatic expression, embodying ideas

and spectacles simple and familiar to the countryside. It is now becoming quite common to hear of plays in Irish or English being performed at the numerous *Féisanna* held by the Gaelic League throughout the country. This is a notable and a hopeful phenomenon. It shows that the Irish mind is recovering its elasticity and initiative, and it gives reason to hope that the effects of this recovery may be felt in every department of Irish work and life.

Ireland a Tourist Resort.

By JOHN COOKE, M.A.

Editor, "MURRAY'S HANDBOOK FOR IRELAND," and "WAKEMAN'S HANDBOOK OF IRISH ANTIQUITIES."

ONE of the many signs of the changes that have contributed to the making of a new Ireland is the rapid development of the tourist movement in recent years. Beyond such beaten tracks as the Killarney district, County Wicklow, and the Antrim Coast, the remainder of Ireland was practically a *terra incognita* to those who made up what is known as the travelling public. The Swiss Mountains, the Tyrol, the Coast of Norway, or even Egypt, were better known to the British tourist than the Donegal Highlands, Connemara, and the grand peninsulas of Kerry. The reason is plain. Except for the enterprising pedestrian prepared for roughing it, or the sportsman who knew his way about, the difficulties of travelling were insurmountable to the average travelling man. The distances between places where quarters could be had were too great, and there was no organisation to lessen the difficulties of locomotion, or secure adequate food and lodging at necessary stopping places. But now all that is changed. Railway enterprise has been especially active in opening up outlying districts, numerous hotels have been erected to meet the new demands, in some places even creating such, notably in the case of those owned by railway companies, and Messrs. Cook & Son have been very effective in systematising route traffic through the agency of the railway, steamshipping and coaching companies, and especially in bringing hotel charges into something like uniformity throughout the country. The chief British railways have established a combined system of tourist rates covering the whole Kingdom, so that every facility is now given to the tourist to travel Ireland through and through. It is now possible to make

a circuit of the rim of Ireland by train, coach and car, and at the end of a moderate day's journey secure adequate accommodation, and see at the same time nearly all that is best worth seeing of the distinctive features of Irish scenery. This could not be said twenty years ago ; in fact the development is so marked that it has exceeded the most sanguine expectations of those who have given thought, time, and money to the enterprise.

The Light Railway system, inaugurated by Mr. Arthur Balfour, has been of especial benefit in bringing the trunk lines in touch with the Atlantic seaboard from north to south ; and these have been brought together by other railways, or steamers in some places, and connecting links of coach or car routes. The spirit of enterprise has also affected two English railway companies in a very marked way. The Midland directors have purchased the Northern Counties Railway system, built a harbour at Heysham, in Lancashire, at great cost, and established a fine steamer service between it and Belfast, Dublin and Londonderry. The Great Western Railway, in connection with the Great Southern and Western of Ireland, has established a rapid service between Fishguard in Pembrokeshire and Rosslare in County Wexford, with a quick service of trains from Paddington ; and on the Irish side to Cork, Waterford, Killarney, and Dublin. The whole south of England and Wales is thus brought into very direct communication with the south and centre of Ireland. The charge, therefore, that Ireland is a difficult country to get at, and a difficult country to travel in, can no longer be made ; there is nothing to justify it. Any difficulties that exist are those incidental to travelling everywhere, and we doubt if there is a country in Europe where more kindness, courtesy, and hospitality is to be met with than in Ireland ; nowhere where the amenities of social life among civilised people meet with such a ready response and so hearty a recognition.

The traveller who has never been to Ireland has, as a general rule, a poor or erroneous idea of the characteristics of the country as a tourist resort. The notion that Ireland is wet, and Ireland is all bog is but too common. That Ireland is wet is true in the general sense that it has an insular climate, somewhat moister as a whole than England, and it is this which gives the country the claim to the pre-eminent title—"The Emerald Isle." But we think we are right in saying there is no part of Ireland wetter than the Styne in Cumberland. The rainfall is about the same as that of Scotland, and the climate is not so cold as that of North Britain. That Ireland is all bog is most misleading ; her

area of cultivable land is fully three-fourths of the whole area, and bog covers about one-seventh of the country. Though wonderful colour effects are produced on a bog expanse under certain conditions of the atmosphere, through the play of light and cloud shadows, the general impression left on the mind is one of extreme dreariness and monotony, and bogs seem to loom larger in the memory than other scenic features when a traveller comes in touch with them for the first time.

The scenery of Ireland lies chiefly in the mountain rim that circles the greater portion of the country. In some places

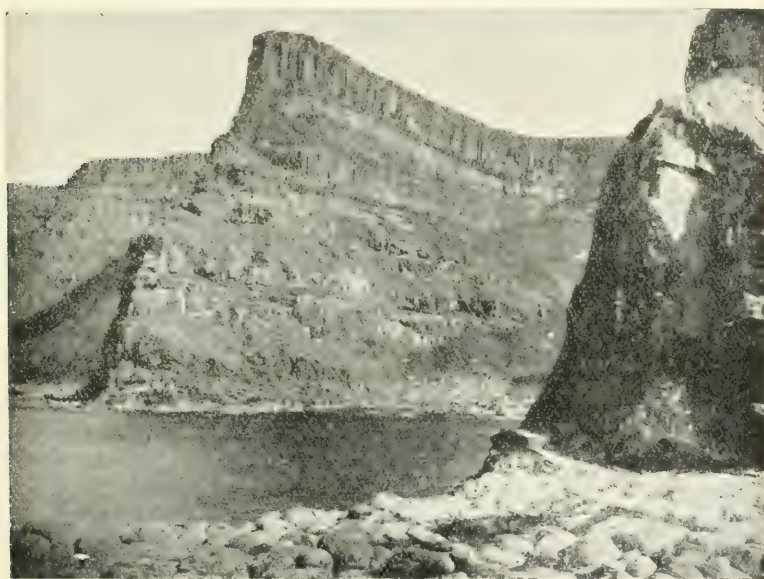


Photo by THE AMPHITHEATRE, GIANT'S CAUSEWAY. [*Lazearce, Dublin*]

the mountains rise from the sea in precipitous masses or sheer rock wall, making the cliff scenery of Ireland to rank among the finest of its kind in Europe. The splendid coast road of Antrim gives an example of this, and the basaltic sides of Fair Head, Pleaskin, and others on the north coast are finer still. Horn Head in Donegal is a grand mass of sheer precipice, and has a wildly impressive sea front. Slieve League is magnificent whether viewed from land or sea, descending, as it does, from a height of 1,972 feet. The north coast of Mayo has some fine stretches of cliff scenery; but the cliffs of Achill are on a stupendous scale, and far

excel these—being, indeed, the finest in Ireland. The view from the top of Croaghuaun is magnificent, for here is a shattered mountain mass with precipitous and shelving sides descending to the sea from a height of 2,192 feet. Wild goats still breed here in full security in one of the last of their haunts in the British Isles. The Cliffs of Moher form a grand rock wall, rising sheer from the sea, for some miles along the coast of Clare. County Kerry also furnishes fine examples of the same class of scenery, the drive round Sleah Head being worth taking any pilgrimage to see.

Beautiful lake and river scenery lies among the mountain groups that gird the coast, the most famous example being Killarney. But many spots rivalling Killarney in one or more special attractions will be found by the tourist who takes trouble to explore off the beaten tracks. The traveller with time on his hands will always be repaid, too, if he climbs a mountain, especially near the sea, for the grandeur of the extensive view of the varied scenery it discloses.

The scenery of Co. Wicklow is justly famed for its charm and variety. Here are beautiful lakes, exquisite stretches of rushing waters, with thickly wooded banks, and fine wild mountain passes, all these being perfected at Glendalough, which has the additional interest of possessing one of the most remarkable series of remains of the early Christian settlement in Ireland—its so-called Seven Churches, Round Tower, Crosses, and fine Gateway.

The peninsulas of Kerry furnish a very different class of scenery. Roads and railways now carry the tourist round them, and magnificent views are afforded of the great arms of the sea, such as Kenmare River and Bantry Bay, running nearly thirty miles inland. Such spots as Glengarriff, Parknasilla, and Caragh Lake can hardly be equalled in the British Isles; and the tourist will find in these places first-class hotels, and ample accommodation at many other places also should he drive on, making a circuit of the coast of Kerry.

Connemara, with its wild mountains and teeming lakes and rivers, prolific with salmon, white and brown trout—an angler's paradise—is well supplied with hotels, and coaches run from Clifden to Westport, with a stop at Leenane, which is a splendid centre for sport and excursions.

The Highlands of Donegal are equally wild, but are well supplied with hotels. Fine golf links have been laid out in several places, notably at Rosapenna and Portsalon, in connection with the first-class hotels at these places. Golf has taken deep root in Ireland, and the links at Portrush, Newcastle, Lahinch, Rosapenna, and Portsalon rank among the best in the British Islands.

Ireland has vast areas of water over which the fishing is free, but this is generally from boats. All the great lakes in the West, the Killarney Lakes, and many others, nearly the whole of the Shannon, and many other rivers, large and small, are free to the salmon and trout fisher, and a £1 licence covers the whole country. Most of the best stretches of the rivers are, however, preserved, but in many places these are let to the angler at charges varying from 5s. to £1 per day. Fish run large in Irish waters, the Shannon frequently giving the largest salmon caught in the British Isles during the year on

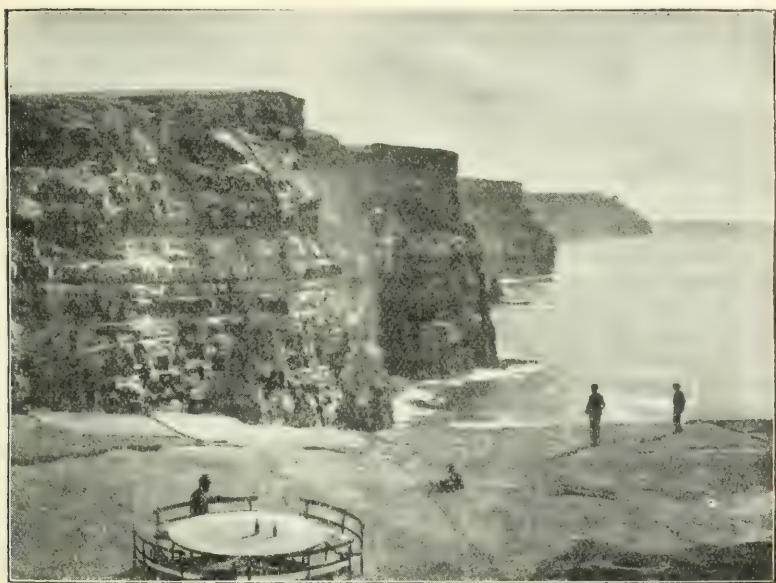


Photo by]

CLIFFS OF MOHER, NEAR KILKEE.

[Lawrence, Dublin.

the rod. Trout of very large size, including the ferox, are caught in the great lakes; great pike are found especially in the West, and no year passes that one or more of all these are caught in Irish waters, making a probable record for the fortunate angler. The Westmeath lakes have long been famous for May fly-fishing, but as good, if not better, sport can be had on Loughs Corrib, Mask, and Derg. The anglers' hotels in all these centres are moderate in their charges, and for boat and man the cost is but 5s. or 6s. per day. More attention is now given than formerly to the preservation of the waters, and public opinion is increasing as to the great

national asset Ireland possesses in her angling waters, and the necessity of their further protection and development.

Ireland is now a popular resort for motorists, the great Gordon-Bennett race of 1903 having turned the attention of the owners of cars to its attractions in this respect. There is not the same stringency on the part of the authorities in the enforcement of the Motor Act as is shown in Great Britain, and ordinary courtesy and consideration on the part of drivers of cars will receive prompt and ready response from the owners of other vehicles. A word of caution is needed: First, as to the number of animals loose on the public roads—a common custom in Ireland. Secondly, in passing through villages and towns, and often wayside cottages, vehicles will be found standing at the doorways, so that fast driving or the sounding of a horn will cause a horse to bolt. Watch should be kept on culverts, which are very often badly made, and if struck at high speed a smash is the result. Cross roads should be approached with care, as high hedges are common in many country places, and the approach of a car can be neither seen or heard. The roads in the great central limestone plain are fairly good in dry weather, but in wet they are greasy and the ruts so deep that driving is anything but a pleasure. But the round of Ireland may be made without crossing the plain at all, although such counties as Kildare, Westmeath, King's and Queen's County, Carlow, and parts of Tipperary are well supplied with good roads. Yet, speaking generally, the best roads are where the best scenery is to be met with, and that is round the coast. We recommend the motorist landing in Ireland to arrange his itinerary as far as possible through the counties bordering on the sea, and with his Ordnance Survey or other maps he will find little difficulty in planning his route from day to day. Care should be taken in leaving towns, small or large, to ascertain his right road—there may be two or more in the course of a few hundred yards or so leading from the place more or less in the same direction. Garages or other suitable provision for cars will be found at all hotels, and the general rule is not to charge for such accommodation. Motor spirit will be found in all towns, and repair or fitting shops in most.

To those interested in Archæology, Ireland furnishes an exceptionally wide field of study. Remains of the Stone (Neolithic), Bronze, and Iron Ages abound in much profusion. In the National Museum, Dublin, will be found the great collection of the Royal Irish Academy in which these Ages and the Early Christian Period are fully represented. This collection, taken as a whole, is perhaps the finest and most representative national one in Europe. Throughout the country

Cromlechs will be met with everywhere. These are burial monuments of the Neolithic Age, and many examples will be found in the County Dublin, notably at Howth, Mount Venus, Kilternan, and Glendruid. They generally consist of three or more immense blocks of unhewn stone, standing upright and supporting a great covering stone, usually in a sloping position. In the ground beneath the body was buried, and here bones, urns and ornaments have been discovered in excavation.

Raths exist in thousands all over Ireland, and many of these have interesting underground chambers, which were, no doubt, used as places of retreat in time of danger, or for



Photo by]

PASS OF GLENGESH, DONEGAL.

[Lawrence, Dublin.

storage purposes at other times. Rathes are built of earth and consist of one or more circumvallations, and were used either as places of defence or places of assembly like the moats of England, and some were, no doubt, used for both purposes. In the West of Ireland and other places where stone is plentiful the earthen fortification was replaced by a stone enclosure, invariably well built of dry masonry, and fine examples of these will be found in the Aran Islands, County Clare, and Kerry. Pillar stones are numerous, many of them having the curious Ogam script consisting of a series of incised straight lines and dots (the vowels) along one of the edges of

the rough block, and this is called the Flesk Line. The inscription consists of nothing but the name of a person and that of his father. Many examples of these stones may be seen in the National Collection.

Tumuli are numerous in Ireland, and are found in all sizes and variety, from the simple cairn to the immense chambered mound of Newgrange and Dowth, near Drogheda. Newgrange is probably the finest burial mound of the Bronze Age period now existing in Europe. Within is a series of chambers approached by an underground passage over 60 feet in length, built of great upright stones. The central chamber is 19 feet high and of a circular beehive shape, formed by overlapping the successive courses of stones until the top was small enough to be closed by a single slab. Within the chambers the cremated remains of the dead were placed in or covered by an urn. It is estimated that 100,000 tons of stone were used in erecting this great mound. But the chief glory of Irish antiquities lies in the remains of the Early Christian Period. These consist of primitive churches and cells, round towers, numberless crosses, varying from the small incised slab to the magnificent sculptured crosses of Monasterboice and many other places. The monastic establishments in these early days were not only the centres of learning and art but also centres for the training of men for missionary work abroad, as names on the continent of Europe still attest. The primitive stone ecclesiastical structures in Ireland are very numerous; many of these are oratories which exist in remote places on islands in sea or lake, the tops of mountains and other wild retreats. These were evidently erected for the private devotion of the founder whose cell was erected close by. The stone roofs of most of the early churches have fallen, but those still standing show that they were high pitched, and the finest example is that of King Cormac's Chapel, one of the great group of buildings that crown the Rock of Cashel. Here, and in churches of a still later date, are exhibited the same striking characteristics of Irish decoration in the wonderful scroll work, interlaced pattern, grotesque heads and curious figures so noticeable in the metal and, especially, the manuscript work of the early School of Irish Art.

Of Round Towers about seventy still remain; but most of these are ruined, only thirteen being perfect or nearly so. Built adjoining ecclesiastical foundations they were used for purposes of defence or retreat in time of danger, especially against the Norse rovers who raided the country up and down. Their use also as belfries is obvious. Controversy long raged over their origin, age and use, but modern investigation now

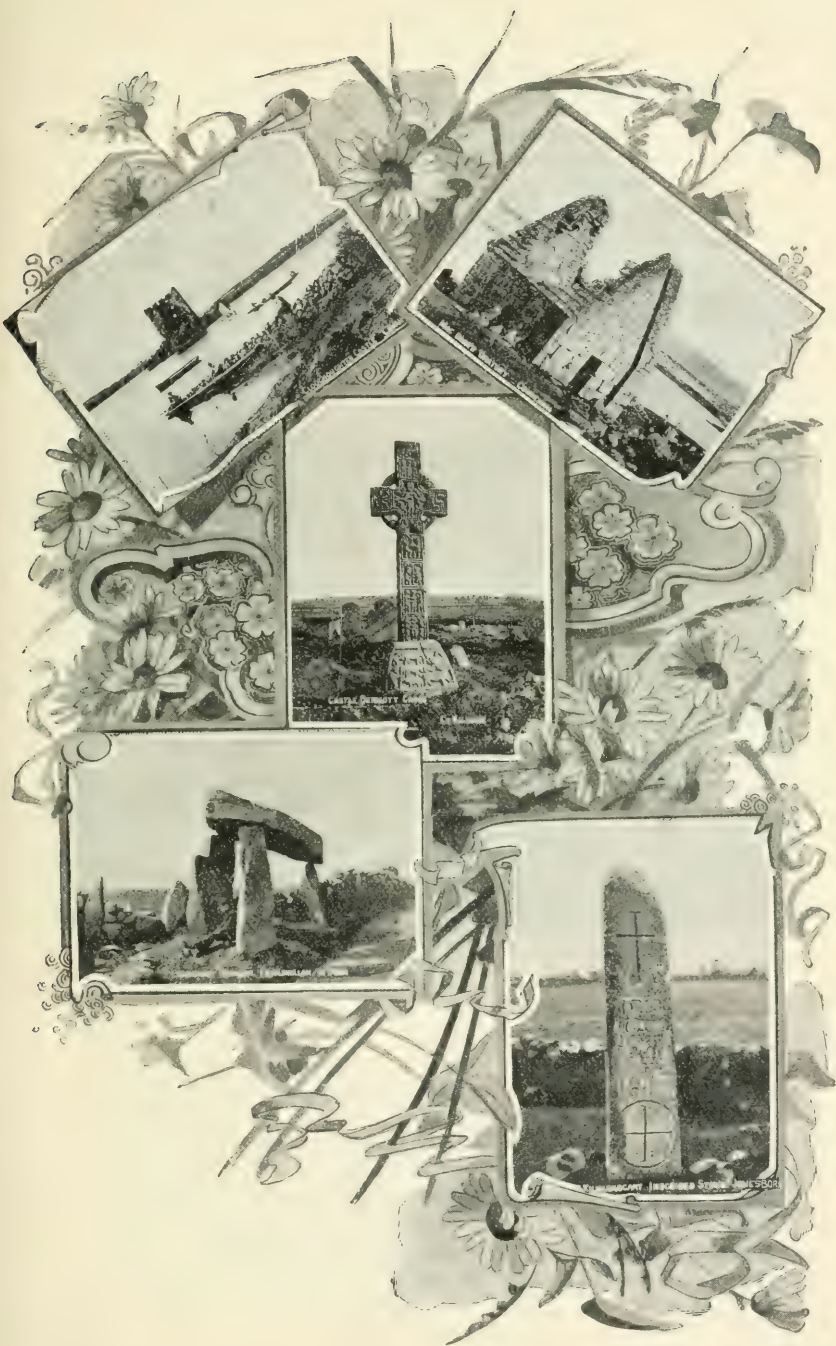


Photo by]

SOME ANTIQUITIES OF IRELAND.

[Welch, Belfast.

assign them to the period lying between the end of the ninth and the first half of the thirteenth centuries.

Of the Abbeys belonging to the many orders of monks erected after the coming of the Anglo-Normans there are numerous remains, and, though possessing many interesting features, none of them are on the same scale of magnificence as those in England. While the Castles, too, are numerous, the majority, like the abbeys, are inferior to the great baronial strongholds of early medieval England. A few have been preserved and modernised, such as Howth, Kilkenny, Lismore,

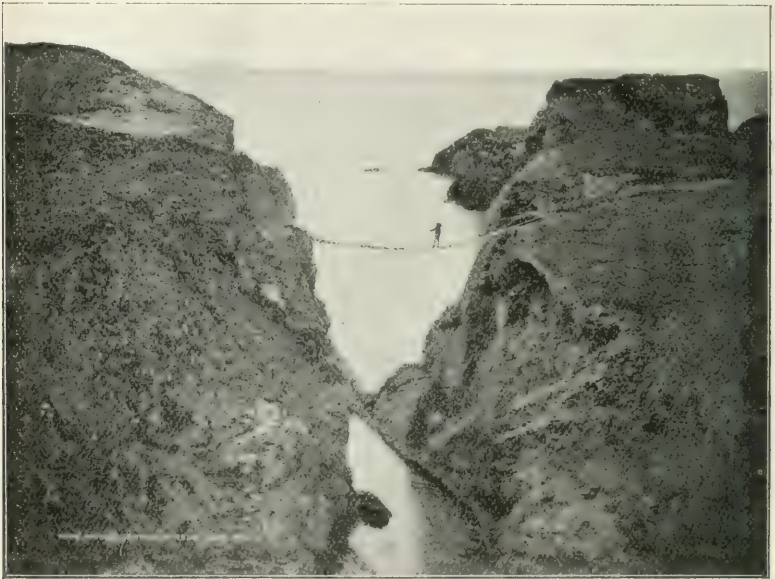


Photo by

CARRICK-A-REDE.

[Lawrence, Dublin.]

and others; and of the Walls and Gateways which protected many towns most have disappeared in the course of time, but examples will be found at Limerick, Drogheda, Trim, Athenry, Waterford, Kilmallock, and other places.

Many of the archæological remains in Ireland are under the control of the Public Works, but the great majority are not so, and consequently suffer from want of care and preservation. An archæological department vested with powers to deal with them in a wide and comprehensive way is sorely needed, and this is now all the more necessary under the new scheme of purchase and the consequent change in the ownership of land.

Irish Bands and their Possibilities.

By W. J. BUTLER.

The nights shall be filled with music,
And the cares that infest the day
Shall fold their tents, like the Arabs,
And as silently steal away.

Longfellow.

THE foregoing efforts to improve the conditions of village life are eminently practical, but there is yet another subject to be treated of, upon which, more than any other, may depend the happiness and contentment of the village community.

The element is music—that art so enjoyable and so easily understood and cultivated. A fine picture may gratify the eye of a single beholder, a good book from the village library will appeal to one reader; but music, like mercy, blessing him that gives and him that makes, is alike a pleasure to the performers and listeners, and makes happy the crowd. Hence, should some public-spirited men want to brighten village life, they could find no more wide-spread form of doing so than by the establishment of village Bands, each of which would cost a very small sum of money, but give permanent pleasure to very many people.

When Fletcher, of Saltoun, observed, “ Give me the writing of the ballads of a country, and I do not care who makes the laws,” he paid a powerful tribute to the influence of music. And it was to music of a simple or rudimentary character, for the most enduring and most widely-appealing strains are those which speak to the educated and uneducated alike. The power of music has been the theme of all the great poets and thinkers. Innumerable are the verses and sayings; but, though varying in forms of expression, the dominant note is the tribute to the universality of the power of sound to sway the multitude. In all ages and in all climes have been found primitive instruments, formed on natural principles, and laying the foundation of modern and highly-developed instrumentation. The simple Pipe or Fife, limited to the diatonic scale, is the forerunner of the chromatic Flute of great compass and beauty of tone. The Bagpipe is the pioneer of the Organ—the king of instruments. Rude contrivances of percussion prepare the way for the modern timpani and Side Drums, which great composers have raised to the dignity of solo instruments. All these evolutions show that beautiful music exists in simple as well as in developed forms. The short and simple annals of the poor convey

lessons as deep in thought as the records of the lives of heroes and monarchs ; and village life is as essential to the well-being of the world as that of the most crowded cities. But village life may remain so simple and so much undeveloped as to make the dwellers lonely and desirous of amusement or change. It is here that the charms of music may fall on virgin soil ; here, its recreative faculty may be most beneficially employed.

The possibilities of furnishing music in solo or combined form, to interest, to please, and to educate the occupants of a country village are within easy reach. The natural diatonic scale on which our most melodious tunes are based, can be produced on the instrument known as the Fife, a small variety of the simple Flute. On this easily-played instrument many beautiful melodies can be performed. In the hands of the youngest performer it can be made to produce the softest of love tunes or the most vivacious and inspiring of marches.

The essential element of music is rhythm. The well-marked character of a quickstep can be brought out. When instruments of a different key can be played in combination, say a Fife in the key of Bb, and a Flute and Piccolo in the key of F, effective, although simple, harmonies can be sustained. When, in addition, is employed the Drum, a bass is supplied, and a complete musical effect is the result. With a very little instruction and practice a band of 16 performers can be organised. They may consist of 12 players of Fifes and 4 of Drums. Musical progress is of easy and gradual growth, and there usually out of this beginning springs a larger band, where is used the chromatic Flute, which, being more resourceful, infuses more colour and varied effects, as its construction enables transition into various keys. It is obvious that the more extended are the melodies the greater pleasure to the educated listener, and the more scope afforded for the enrichment of the harmony.

In addition to giving pleasure to villagers, the playing of instruments is highly conducive to good health. Even the simple art of singing is healthful to the expansion of the lungs ; while it is a well-established fact in medical science that deep breathing and continuous practice in the Vocal art have been the means of saving many valuable lives from the dread inroads of the ravages of the white scourge. Dr. Stone, one of the principal doctors in the Brompton Hospital, London, used to order any patient who was threatened with Consumption to take to playing the Clarionet, and so succeeded in warding off the disease ; and he told Mr. James Parkes, who had weak lungs and who taught the Clarionet



IRELAND'S OWN BAND

- | | | | |
|--------------------|--------------------------|---------------------------|------------------|
| 4 1st Clarionets. | 1 Oboe. | 2 B flat Baritones. | 1 Bass Trombone. |
| 4 2nd Clarionets. | 2 E flat Piccolos | 1 B flat Euphonium. | 2 Side Drums. |
| 2 3rd Clarionets. | 2 E flat Flutes. | 2 E flat Basses. | 1 Bass Drum. |
| 2 4th Clarionets. | 1 E flat Alto Clarionet. | 3 B flat Tenor Trombones. | 1 Pair Cymbals. |
| 1 E flat Clarionet | 2 Bass Clarionets. | | |

at the Royal Military School of Music, Kneller Hall, that he would prolong his life by continuing his playing.

The playing on the simple wind instruments mentioned will expand the lungs, broaden the chest and shoulders, and so develop the frame generally. The habit, too, of marching with Bands is most healthful. Who has not observed with pleasure the bright and erect appearance of the crowds of young and old alike, who with bearing erect and rhythmic step keep time to the piercing sound of the Fife and the regular tap of the drum ?

To those who have strong attachment to historic associations the Pipers' tune appeals with undying force. The merry sound of a lively reel or jig, the stirring strain of the war-march of a clan, whether it be McSweeny or O'More, hold many in thrall, and their hands will still grasp lovingly the Union Pipes ; and their praiseworthy example is being followed with increasing volume.

The number of Pipers is daily extending its circle. The Rev. J. Dunne's band at Armagh Cathedral has reached the fine dimensions of 14 Pipers, all admirable executants, and their fine performances are of great interest.

There are other forms of bands of increased numbers and of varied instruments. Reed and Brass Instruments have been introduced to further enrich the musical effect.

In this connection there are Bands of various types and orders.

Trade Bands have always maintained a high standard in Dublin. Bands not confined to a particular trade, but to a particular club, are in abundance. The spread of temperance has led to the establishment of many bands of teetotalers.

At St. Louis Universal Exposition there was in the Irish Section a Dublin Band of over 40 performers, all of whom were teetotalers. They became most popular and visited several large cities after the close of the Exhibition. Their execution was equal to any public band, and to-day "Ireland's Own" Band is listened to with pleasure by the most critical.

The Bands of charitable or other Institutions are numerous. In many large manufacturing establishments have been formed bands confined to the employees.

The Boys' Brigades, too, are extending. All these possess elements which stimulate the ambition of the members.

Clubs are keenly conscious of the popularity attached to a good display by their members. The heads of Institutions look also to the practical side of the training, for it enables boys—very frequently orphans—who show proficiency to



GLENCREE REFORMATORY SCHOOL.

2 E flat Flutes.

1 Piccolo.

1 1st E flat Clarinet.

1 2nd E flat Clarinet.

5 1st B flat Clarinets

2nd B flat Clarinets.

2 3rd B Flat Clarionets.

1 Soprano Saxophone.

1 Alto Saxophone.

1 Oboe.

1 1st Bassoon.

1 2nd Bassoon.

5 1st B Flat Cornets.

2 2nd B flat Cornets.

1 1st Horn.

1st and 2nd Horn.

1 3rd Horn.

1 4th Horn.

1 1st Baritone.

1 1st Baritone.
1 2nd Baritone.

1 2nd Baron. Trombone.
1 1st Tenor. Trombone.

Shogakukan, Tokyo, pp. 1-2.

1.414.1000 Trombone.
1.414.1000 Trombone.

2 Euphorbia.

4 Bases.

+ Basses.
1 Bass Fiddle.

2 Side Drums.

1 Side Drums.

Bass Drum,
Triangle and Cymbals.

follow up music as a profession, and some of the best Bandmasters in Dublin at present have graduated at the local Institutions.

Incidentally there is much material prosperity in the train of a good Band. The attractive uniform and cap, to be distinctive, gives employment to the designer. The making up the dress and the cloth of which it is composed gives employment to the local worker. The orderly life and sobriety it imposes upon members cannot but reflect benefit on the home circle.

Where music can be employed in outdoor religious processions, bands supply the necessary sustaining accompaniment to a large body of singers.

It is remarkable as showing the progress instrumental music is making that Bands are equipping themselves with better classes and more expensive makes of instruments. They are extensively introducing instruments capable of adjusting the tuning to a nicety, thereby showing that their ears and sense of tune are becoming daily more cultivated and acute.

Amongst the most prominent of Institution Bands is that of Glencree School, Co. Wicklow. Its traditions are good, but of late its progress has been wonderful. This may be traced to the exertions of the present Superior, an enthusiastic musician. Madame Patti when on a visit to Glencree was so gratified to find such a musician, that she gave the occupants the unusually generous treat of her singing.

Mr. Goosens, the famous Conductor, was always pleased of the kindly and matured criticism of Rev. F. McArdle, and gladly availed of his help in the production and staging of many grand operas. It is no wonder then that the Band should be of late a success. The composition of it is large, and embraces the instrumentation mentioned on accompanying illustration. It will be seen that the Band is complete in every detail, even to that beautiful "Brass Reed" instrument which forms a bridge between the Clarionets and the Saxhorns, *i.e.*, the Saxophone, an Instrument, unfortunately, more often found in Bands on the Continent and in America than in England or Ireland.

THE BLARNEY TOWN BAND.

In connection with the industries of Ireland the employees of the celebrated Blarney Tweed Manufactory of Messrs. O'Mahony Bros. has for many years maintained, under the presidency of the heads of the firm, one of the finest Bands



BLARNEY TOWN BAND.

10 B flat Clarionets,
1 E flat Clarinet,
1 E flat Piccolo.

5 B flat Cornets,
4 E flat Tenor Horns,
2 B flat Baritone.

2 B flat Tenor Trombones,
1 G Bass Trombone,
1 B flat Euphonium.

1 E flat Bombardon,
1 E flat Circular Bass,
1 Bass Drum.

1 Side Drum,
1 Pair Cymbals,
1 Triangle.

in the South of Ireland. It consists of Brass and Reed instruments. The fine performance of this Band is the greatest source of pleasure in the district of Blarney.

Amongst the many fine Total Abstinence Bands in Ireland may be mentioned the St. Michael's Total Abstinence Band, Belfast, and it is noteworthy that this Band has lately acquired a more up-to-date instrument in the improved models of Fifes, which, with the mechanical addition known as the Slide Head and Screw Cork, possess the advantage of tuning to a far greater nicety than the ordinary Fifes.

In the matter of the extension of Bands, the question of obtaining proper instruction is one that presents itself. In remote country districts there will always exist a difficulty in obtaining instruction. But when public opinion discovered in other branches of music that there was need of instruction, a scheme was devised for providing it.

Itinerant instructors and organisers in bee-keeping, dairying, poultry rearing and small industries have introduced modern methods and appliances with good results.

The subject of vocal music in the National Schools was taken up by the appointment of a Head Organiser, Mr. Peter Goodman, and some few sub-organisers, and vocal instruction in tonic solfa has been placed on an enduring basis.

In 1898 the Final Report of the Commission on Manual and Practical Instruction was issued. In this Report the Commissioners quote the statistics of the teaching of vocal music in primary schools of the United Kingdom for the year 1896. In that year the percentage of schools in England in which singing was taught was as high as 99.88, and in Scotland no less than 96.63 : while in the National Schools of Ireland in the same year it was so appallingly low as 14.48 : so that in the year 1896 music was taught in practically every school in England and Scotland, and in but one out of every seven here in Ireland !

To remedy this state of things an Inspector and Head Organiser of Musical Instruction was appointed in 1900, and a staff of six assistants assigned to him. The object of his and their appointment was to extend and develop the teaching of vocal music everywhere throughout the schools of the country. Five years was to be the period of their engagement.

In September, 1900, the Organisers began their work. During the next five years they overran the country, preaching everywhere the doctrine of elementary Solfa to teachers and to children. Their evenings were devoted to the teachers, and their days to the schools and school children. In 168 different centres they held Teachers' Singing Classes, which

were attended by over 6,400 teachers. By the end of their period of engagement (March, 1904) the percentage of National Schools having singing a subject of instruction in them had risen to 75. The number of schools in which singing was taught had increased from 1,475 in 1899 to 6,683 in 1904.

In a scheme for the providing of teachers of instrumentation it may be kept in view that the theory of music in its rudimentary stage is now known over all the schools in Ireland through the labours in the introduction of the tonic solfa. So that much of the ground is prepared for instruction in advanced Band work.

It is desirable that the musical instruction which is laboriously instilled into the minds of school boys should be carried on to the age of manhood.

At fourteen years a break occurs in the singing voice of boys. If then they took up the simple Fife or chromatic Flute, or the Drums, their previously attained knowledge of the theory would render execution on the instrument selected a matter of ease.

An admirable suggestion has been made by a practical enthusiast in such matters, and one that may be brought to a happy fulfilment. The idea is to start an annual competition, which at every stage in its progress would increase in interest. The first contest would take place amongst the Village Bands: the winners would then have a contest in their County. The result of this could be played off amongst all the counties in the particular Provinces. The four Provinces then to hold a contest finally for the All-Ireland Prize; the concluding competition for the Championship to be played off alternatively in Dublin, Belfast, Cork, Derry, Waterford, and Limerick.

Contests and competitions are calculated to stimulate study and practice amongst Band members. Rivalry between the trades or clubs of a city, or of a county, or of a Province, can by process of exhaustion culminate in a Grand Band Contest, or even in time to a Grand International Band Contest.



Irish Traditional Dancing.

In relation to Home Industries and Irish Manufactures.

By **DERMOND O'BRIEN, R.H.A.**

THE importance of the section that is given over to Irish Home Industries and Manufactures in the International Exhibition, Dublin, is a striking proof that good work, long needed, can be done, and that the interest in it is extending its borders yearly, not only sentimentally but also commercially.

That Traditional Dancing should be seriously considered in connection with Irish Industries need occasion no surprise when we consider that healthy conditions of mind and body are essential to good work, and it must be the aim of everyone to consider how these can best be attained. Fresh air, suitable exercise, and change of mental and physical surroundings are essential, and should go hand-in-hand.

It is not sufficient that a lace maker sit at her door with her cushion and bobbins on her knee, as one sees in the streets of Malines, in Belgium; nor is the exercise entailed in weaving sufficient by itself, nor the gossip of the workroom calculated to develop mental power.

Neither is it sufficient, as too often happens with us, that the boys should meet together when not at work to support that pillar of finance, the public-house, to play pitch-and-toss, or to sit under a hedge playing cards; or that the girls, when their daily task is finished, should sit at home "with their hands before them like a lady," or don some inappropriate finery not of their own making, to go to the station and see who has come and who is going, and to make giggling comments on all they see.

What we want for our workers is some form of recreation which ensures a maximum of exercise in a minimum of space, which can be indulged in out of doors and indoors, in summer and in winter, by small numbers or by large; one which needs no costly plant and no preparation, which is enjoyed by the beginner and cannot be exhausted by the expert, and is in harmony with the character of the people.

To find this ideal recreation we need not go outside our own country.

Irish Traditional Dancing is suitable to the conditions prevailing, it brings with it a stimulus to mind and body, it gives occasion for the two sexes to meet in social relations, and it carries on and augments the feeling of nationality.

Our National traditions in the greater part of Ireland had sunk into abeyance until recently, and it is only during

the last decade that the "Language Movement" has come to the rescue of Irish Nationality by the gathering up of the threads of traditional speech, music, and games.

Now, let us see in what direction tradition points for relaxation, recreation, and exercise suitable for either sex, and the conditions prevailing. We have in Ireland a wonderfully rich store of ancient melodies, traditional dances, and folklore, and if, as most of us believe, love for our old traditions begets pride in our nationality and in our country, and hence self-respect, then in the carrying on of our traditions we should expect to find the conditions essential to health and good work.

And is this so? Most undoubtedly in the cultivation of our traditional dances it is. Dancing is essentially a healthy form of exercise for either sex, and as we shall see Irish dancing is peculiarly so.

The Waltz and Polka, imported from Germany, necessitate, to be properly danced, a polished floor and light shoes and music entirely foreign to us. It becomes merely ridiculous when stamped out on a mud or flagged floor with heavy boots, and is of no interest to the onlookers. It is quite otherwise with our National dances. Irish traditional figure and step dancing can be danced anywhere, in or out of doors, barefooted or in heavy boots, and can only be danced to Irish traditional music. Moreover, no volume of music is required, for the essence of the dances is to beat out and emphasize the rhythm of the airs played on flute, fiddle, or the humble concertina.

Mr. O'Keefe has written an admirable little book on Irish traditional figure dances, which he claims to be of earlier date than step dances proper. This may be so, but the question of date seems to me to be immaterial.

My own idea is that one grew out of the other. The ingenious dancer filled up the intervals of the figures or varied the monotony of the "side step" with every sort of intricate step or combination of steps of his own devising, like beautiful stitches in the filling of a lace pattern.

I have myself often seen the enthusiastic master of his art of step dancing who could not content himself with the simplicity of the waltz or polka, but wove an elaborate embroidery of his own about it without either altering the time or interfering with his partner.

Anyhow, there is a great number of different dances, made up of intricate combinations of the Grind, Shuffle, Batter, Drum, &c., and it is no mean accomplishment to be able to "take the floor" when there is a call for a Jig, Reel, Planxty, Slip Jig, Hornpipe, Blackbird, Priest in his

boots, Drunken Gauger, &c., most of them difficult to learn and remember and hard exercise to dance.

And the fact of their being hard work is another element in their suitability to the prevailing conditions when taken in conjunction with their intricacy, for those who have danced are just as much interested and ready to watch others performing in friendly rivalry.

Again, to follow up the tradition, such hard work cannot go on for long at a time, and there is usually a call for a song or sometimes for a story if there be a good story-teller present.

I regret to have to say that usually the song turns out to be some commonplace or vulgar emanation from the English music halls. It is the same thing in England, and those who are interested in reviving her old folk-songs, madrigals, and part-songs resent as bitterly there as we do here the invasion by the vulgarity of the music halls.

It should be a song or ballad in Irish to some one of the old melodies, the characteristics of which still come out curiously even when the singer is interpreting an English song.

We are unfortunate in Ireland in that we have no tradition of part-singing as exists in Wales, parts of England, and on the Continent.

Our melodies for the most part probably date from a time when harmonised melodies were unknown, and the sixteenth century which saw England founding the great traditions of vocal harmony, saw Ireland plunged in a chaos of strife that gave no chance for the cultivation of the arts. The language movement and the teaching of singing in the schools, is, however, altering that, and though with the practical loss of our national language we have lost most of our national folk-songs and ballads, yet from those we have when known and sung will be produced new songs and topical ballads, as indeed I have heard in the north of Donegal.

I think I have shewn that the Irish tradition of dance is admirably adapted as a recreation from the point of view of sociable physical exercise, and it will not be hard to shew that it is so also as a mental exercise, if the mere fact of its being associated with singing should not suffice.

You have only to attend a class where step dancing is taught to see that it requires great patience, concentration and memory to learn even the more simple of the traditional dances, for nothing slipshod would pass muster before the keen eyes and ears of those courtly old dancing masters that I have known, with their running commentary of "don't be looking at my old shoulders but hold yourself

up," "you missed a tip there," "now the left foot equally so," and finally, "now we'll link it to the music, for music is the tell-tale. ² Music you know is the father and mother of dancing."

One point the older masters were very particular about, now, I am sorry to say, often neglected, is that it was unseemly for the girls to dance the elaborate "thick" dancing of the men. The neat "cover the buckle shuffle" was the invariable finish, instead of the more noisy and emphatic "grind" taught to the boys, and to some extent made necessary from their wearing heavy boots; the girls had to dance quietly, even demurely, while the boys were taught to "get off the ground."

And what a wonderful dignity of carriage is to be found among the older generation of dancers. I have seen a portly old lady, the mother of fifteen, led out by the courtly old dancing master to show the youngsters how it should be done, and nothing could exceed the dignity and lightness of that old lady's dancing, head erect and her petticoats held down and back sufficiently just to show the neatness of her steps.

I hope that I may have made it clear that with such traditional music and such traditional dancing requiring patience, concentration and memory, and with the added joy of friendly rivalry in song and dance, you can have no finer form of recreation for those employed all day in sedentary and monotonous occupations. But if I have not done so in words, go and learn to dance a jig or figure reel and you will soon recognise the educational value to mind and body in Irish traditional dancing.



Home Industries in Ireland a Thousand Years ago.

By P. W. JOYCE LL.D., M.R.I.A.

Author of "A Social History of Ancient Ireland," &c., &c., &c.

ARTS, trades, and industries of all the various kinds were practised in Ireland in old times—from the sixth to the twelfth century—carefully and successfully ; and the articles of everyday life, which were as numerous and varied in those days as now, were made at home by special tradesmen (or women), all with their several suitable tools and appliances.

All the chief materials for the work of the several industries were produced in Ireland. Those for clothing were everywhere abundant ; of wood there was no stint ; and there were mines of copper, iron, lead, and possibly of tin, which were worked with intelligence and success.

From the most remote times there were in Ireland professional architects or builders, and we find them mentioned in our earliest literature. There were two main branches of the builder's profession—stone-building and wood-building. An *ollave* or head builder was supposed to be master of both, and, in addition to this, to be so far acquainted with many subordinate crafts as to be able to "superintend" them, as the old Irish Law expresses it : in other words, to be a thorough judge as to whether the work was properly turned out by the several tradesmen, so as to be able to pass or reject as the works deserved : all which resembles what is expected from architects and builders of the present day.

Metal-work attained to great perfection, even in Pagan times. The old workers exercised their skill in making and ornamenting shields ; trumpets ; swords with their hilts and scabbards ; chariots ; bridles ; brooches ; gold gorgets or



ANCIENT IRISH SPRING BROOCH.

circlets for the neck ; and so forth. The brooches they made were of various patterns ; but it is worthy to mention that their "spring brooch" anticipated exactly the construction of the modern "safety pin." Perhaps the most

beautiful examples of the skill of our old Pagan artistic metal workers are the specimens of gold work, which may be seen in the National Museum, Dublin, and of which most were made many centuries before the Christian Era. The most remarkable are what are now commonly called "Crescents," of which we have many in the National Museum. These are broad circlets of pure gold to be worn round the neck, all covered over with ornamental designs. Both the general shape and the designs were produced by hammering with a mallet and punches on shaped solid moulds. The patterns and workmanship are astonishingly fine, showing extraordinary skill in manipulation: they are indeed so complicated and perfect that it is difficult to understand how they could have been produced by mere handwork, with hammers, punches, and moulds. Yet they could have been made in no other way.

We may see then that when St. Patrick arrived, in the fifth century, he found the art of working in metals already highly developed. We know that he kept, as part of his household, smiths, brasiers, goldsmiths, and other artists who were constantly employed in making crosses; crosiers; chalices; bells; and such like.

On the score of obtaining skilled workmen there was no difficulty, for he had plenty of pagan artists to choose from, who, on their conversion, turned their skill to Christian work, and found little difficulty in adapting their cunning fingers to new objects and to new forms of ornamentation. So the primitive pagan artistic metal-work was continued on and improved in Christian times, and was brought to the highest perfection in the tenth and eleventh centuries.

Many of the beautiful objects made by those accomplished artists are now preserved in museums, some of which will bear comparison with the best works of the kind executed by artists of other countries; and a few might be found to bear the palm from all. Of some of these, faithful copies are shown in the Irish International Exhibition.

Among the many exquisite examples of old Irish Christian artistic metal-work in our museums may be mentioned the Cross of Cong, the Ardagh Chalice, the Tara Brooch, and the Shrine of St. Patrick's Bell: all of which will be found described in several published books. Beautiful specimens of artistic bookbinding and other leather work may also be seen, such as the cover of the Book of Armagh (in Trinity College, Dublin), and the cover of the Shrine of St. Maidoc (in the National Museum), both covered all over with complicated interlaced patterns—stamped—in much the same sort of designs as we see in the penwork of the Book of Kells and other

illuminated and ornamented manuscripts. The Tara Brooch was shown some years ago in one of the great London exhibi-



* SHRINE OF ST. PATRICK'S BELL.

tions, and drew the eyes of all visitors. One English writer, who examined it and wrote an account of it, says that he found a difficulty in conceiving how any fingers could have made

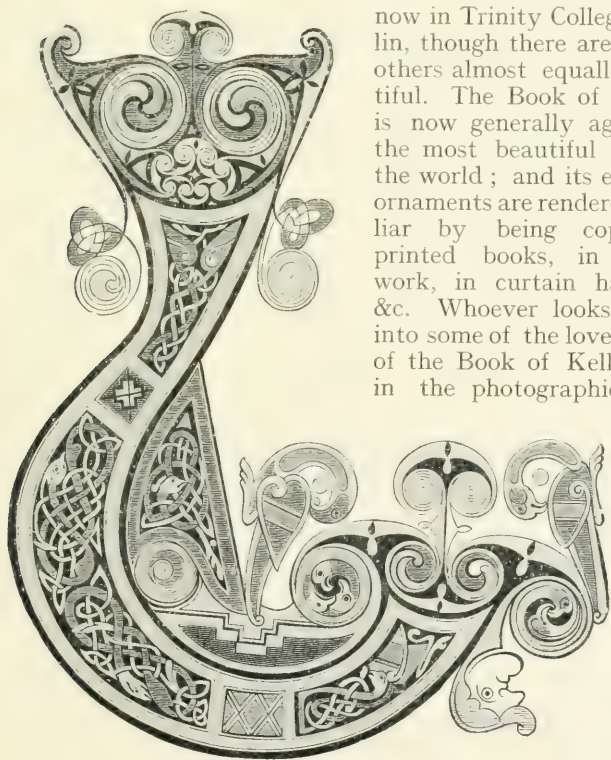
* By permission of the Board of Education, London.

it, and that it looked more like the work of fairies than of a human artist.

We cannot give much space to Irish Art in this short paper, but passing reference must be made to penwork ornamentation. The old Irish scribes took special delight, and used their utmost efforts, in ornamenting and illuminating in colours religious and devotional books, especially the Gospels and other parts of the Holy Scripture: for they justly considered that to beautify the sacred writings was one way of honouring and glorifying God.

The special Irish style of pen ornamentation was developed by successive generations of artists who brought it to marvellous perfection. It will be found described in several books now easily accessible.

Several manuscript books, ornamented in this manner, have been preserved, of which it will be sufficient to mention one here—The Book of Kells, now in Trinity College, Dublin, though there are several others almost equally beautiful. The Book of Kells, it is now generally agreed, is the most beautiful book in the world; and its exquisite ornaments are rendered familiar by being copied in printed books, in needlework, in curtain hangings, &c. Whoever looks closely into some of the lovely pages of the Book of Kells—even in the photographic repro-



CAPITAL "L" FROM BOOK OF KELLS.

Reproduced from the "Facsimiles of The National Manuscripts of Ireland." Part I.
By permission of the Controller of His Majesty's Stationery Office.

ductions—will be inclined to wonder how any human head could have designed, or how any human hand could have drawn them. As a matter of fact, the Welshman, Giraldus Cambrensis, describing another book of the kind that he saw in Kildare seven hundred years ago, was so astonished at it that he has recorded a legend that it was written under the direction of an angel.

A large part of the old Irish art work was done by monks in their several monasteries.

Metallic compounds were carefully and successfully studied by the Irish brasiers, copper commonly forming one of the ingredients. The most general alloy was bronze, formed of copper and tin : but brass, a compound of copper and zinc, was also used. There were two kinds of bronze :—red bronze, used for spear-heads, caldrons, &c. : and white bronze, which was much more expensive, and used for ornamental works of art—fine metal-work of all kinds.

The gracefully shaped bronze spear-heads, which may be seen in hundreds in the National Museum, are, in point of artistic excellence, fully equal to any of those found in Greece, Rome, or Egypt. They were cast in moulds : and we have not only the spear-heads themselves but many of the moulds, usually of stone. In one glass case in the National Museum there are more than forty moulds for bronze axes, spear-heads, arrow-heads, &c. : some looking as fresh as if they had been in use yesterday. The old cairds were equally accomplished in making articles of hammered bronze, of which the most characteristic and important are the great trumpets and the beautifully formed caldrons, many of admirable workmanship : all of which are formed of separate thin pieces hammered into shape and rivetted together with extraordinary skill and perfection of finish.

In old times in Ireland, Blacksmiths were held in great estimation ; and in the historical and legendary tales we find smiths entertaining kings, princes, and chiefs, and entertained by them in turn. We know that Vulcan was a Grecian god ; and the ancient Irish had their smith-god, Goibniu, the Dedannan, who figures in many of the old romances.

The old Irish smith's anvil was something like the anvil of the present day, but not quite so large and heavy : it had the usual long snout, and was fixed firmly on a block. There were, in the forge, sledges and hand-hammers, pincers or tongs, and a water trough. The bellows they used would now be considered very queer, consisting of two air chambers of wood and leather lying side by side and communicating with the blowing pipe. These were worked by a special bellows-blower, who stood with his feet on the two upper boards, and pressed them down alternately, so as to keep up

a continuous blast. The fuel used by metal-workers was wood-charcoal. That made from birch-wood gave the greatest heat : with it the founders or metal-casters were able—with the help of a flux—to melt all ordinary metals.

Let us now pass from Metal-workers.

There was plenty to do for carpenters and other wood-workers, more indeed than for almost any other tradesmen, as the houses then were nearly all made of wood : and there were painters, engravers, and wood-carvers. The makers of vessels of wood, metal, and clay were very numerous, and they were quite as skilful and dexterous as those of the present time. A thousand years ago the Irish coopers were able to make vessels of staves bound with hoops, like our tubs and churns, as water-tight and as serviceable as those made by the best coopers of our day. Vessels of clay were shaped, as at present, on a potter's wheel.

The tools used by the various tradesmen are often mentioned in the *Brehon* (Irish) Laws, from which we learn that there was as great a variety in Ireland then as there is now : but our limited space will only allow us to barely mention a few. There were saws, axes, hatchets, and hammers of various shapes and sizes ; an adze for coopers and shield makers ; compasses for circles : planes both for flat surfaces and for moulding : lathes for turning in wood : chisels and gouges, awls, and augers. Besides the common whetstone they used a circular grindstone, which was turned on an axis by a cranked handle like those now in use. They had also pressing machines for bending wood and forcing it into shape, after it had been softened by steeping or steaming. They used also cranes like ours—with the usual long beak—for lifting heavy loads ; and what is more, they called them by the same name—crane—using, of course, the corresponding Irish word. Artificers of all kinds held a good position in society and were taken care of by the Brehon Law. Among the higher classes of craftsmen a builder of oratories or of ships was entitled to the same compensation for any injury inflicted on him in person, honour, or reputation, as the lowest rank of noble : and similar provisions are set forth in the law for craftsmen of a lower grade.

No individual tradesman was permitted to practise till his work had been in the first place inspected at a meeting of chiefs and specially-qualified head craftsmen, at which a number of tradesmen candidates always presented themselves. But besides this there was another precautionary regulation. In each district there was a head-craftsman of each trade. He presided over all those of his own craft in the district : and a workman who had passed the test of the

examiners had further to obtain the approval and sanction of his own head craftsman before he was permitted to follow his trade in the district. It will be seen from all this that precautions were adopted to secure competency in handicrafts similar to those now adopted in the professions. It would be useful to adopt regulations of a similar kind at the present day.

Young persons learned trades by apprenticeship, and commonly resided during the term in the houses of their masters. The apprentice was bound to do all sorts of menial work—digging, reaping, feeding pigs, &c.—for his master, during apprenticeship.

Working up clothing materials gave a vast amount of home employment. The wool was taken from the sheep with a shears having two blades and two handles, much the same as our present hedge-shears. After the shearing the whole work up to the finished cloth was done by women, except fulling, which was regarded as men's work. Both wool and flax were spun with the distaff and spindle as in other countries; for the spinning-wheel was not invented till the fifteenth or sixteenth century.

The thread was woven in a hand-loom, nearly always by women. The woollen cloth was fulled or thickened by men who practised fulling as a distinct trade.

Our records show that linen was manufactured in Ireland from the earliest historic times. It was a very common article of dress, and was worked up and dyed in a great variety of forms and colours, and exported besides to foreign nations. So that the manufacture for which Ulster is famous at the present day, is merely an energetic development of an industry whose history is lost in the twilight of antiquity. The flax, after pulling, was put through various stages of preparation much like those of the present day. After spinning, the thread was finally wound in balls ready for weaving.

The ancient Irish were very skillful in colours: and the art of dyeing was well understood. The dyestuffs were not imported: they were all produced at home: and were considered of great importance.

The people understood how to produce various shades by the mixture of different colours, and were acquainted with the use of mordants (such as alum) for fixing the dyes. The cloth was dyed by being boiled with the several dyestuffs. The dyestuff for black was a sediment or deposit of an intense black found at the bottom of pools in bogs.

A crimson or bright-red colour was imparted by a plant which was cultivated in beds like table vegetables, requiring great care. There were several stages of preparation; but



GREAT CROSS OF MONASTERBOICE.

By permission of the Board of Education, London.

the final dyestuff was a sort of meal or coarse flour of a reddish colour.

The stuff for dyeing blue was obtained from the woad-plant (called in Irish *glasheen*) after several stages of preparation, till it was made into cakes fit for use. A beautiful purple was produced from a sort of lichen growing on rocks, after careful preparation. A still more splendid purple was obtained from a little shellfish or cockle. This method of obtaining purple was practised also by the ancient Britons or Welsh; and by the same process was produced the celebrated Tyrian purple in still more distant ages.

For sewing, woollen thread was usually employed. Women sewed with a needle furnished with an eye as at present. From an early time needles were made of steel, but in primitive ages of bronze. In those days a steel or bronze needle was difficult to make; so that needles were very expensive: the price of an embroidering needle was an ounce of silver. The old Irish dressmakers were accomplished workers. The sewing on ancient articles of dress found from time to time is generally very neat and uniform. A Belfast writer describes one specimen, found in a bog, as "wonderfully beautiful and regular."

Embroidery was also practised as a separate art or trade by women. An embroiderer kept for her work, among other materials, thread of various colours, as well as silver thread, and a special needle. The design or pattern to be embroidered was drawn and stamped beforehand, by a designer, on a piece of leather, which the embroiderer placed lying before her and imitated with her needle. This indicates the refinement and carefulness of the old Irish embroiderers.

Irish women workers made flat tassels and other small ornamental hangings by interweaving and platting horse-hairs: with the fingers—not in a loom. Several specimens of this horse-hair work have been found in bogs, well preserved on account of the durability of the material; and they are almost—or altogether—equal in beauty, fineness, and regularity, to our best modern lace and crochet-work.

Ladies of the highest rank practised needlework and embroidery as an accomplishment and recreation. For this purpose they spun ornamental thread, which, as well as needles, they constantly carried about in a little ornamented hand-bag.

Some of the early Irish foreign missionaries brought workers from Ireland, who carried on this work, and taught the natives where they settled down. In some places traces of these early industrial institutions remain to this day; as at St. Gall in Switzerland, where there is now a flourishing em-

broidery industry, originating, no doubt, in the school founded there by the Irish Saint Gall in the seventh century, who brought from Ireland, for that purpose, a number of accomplished embroiderers.

The art of tanning leather—generally with oak-bark—was well understood in Ireland; and trained workmen—tanners—practised this work as a special trade. By the process of tanning, the hide was thickened and hardened as at present. Tanned leather was used for various purposes, one of the principal being as material for shoes; and we know that *curraghs* or wicker-boats were often covered with leather. A jacket of hard, tough, tanned leather was sometimes worn in battle as a protecting corselet.

As to workers in leather, there were, of course, shoemakers, of whom the most skillful often ornamented the shoes by patterns stamped in, as described above for book covers. Specimens of such ornamented shoes are preserved in the National Museum. Leathern bags and bottles for holding liquids, and leathern wallets like our travelling bags were then in much use—for which there were special tradesmen. The parts of every article made of leather were joined together by stitching with thongs.

With a mere reference to workers in stone, this brief sketch must come to an end. It is only necessary to point to the round towers and high crosses (of which there is a copy of one in the Irish International Exhibition) to show the admirable skill and the delicate preception of gracefulness of outline possessed by the ancient Irish builders and stone-carvers. A similar remark might be made regarding many of the ancient churches.

During the times under review here there were no big factories in Ireland. The workers, whether men or women, generally wrought at home, so that this Article is properly entitled, "Home Industries in Ireland a Thousand Years Ago."



Rural Industries and Training for Home Life.

By *GEORGE FLETCHER, F.G.S.*

Assistant Secretary in respect of Technical Instruction, Department of Agriculture and Technical Instruction for Ireland.

PART I.

INTRODUCTORY.

THE following observations were embodied in a memorandum prepared by the writer and presented to the Royal Commission on Congestion in Ireland, in the month of May in the present year. For this reason the remarks are especially applicable to the Congested Districts of Ireland. They are, however, applicable to rural districts generally, whether congested or not. The scope of the subject discussed is the question of rural industries and the possible means of improving the condition of the people in the backward districts so far as these might properly be employed by the Technical Instruction Branch of the Department of Agriculture and Technical Instruction.

It has been thought that there is a very real danger that Home Industries, as now practised, tend to unfit those engaged in them for the duties of home life. This question is considered later in connexion with proposals for remedying the defect.

First, however, it would be well to endeavour to arrive at a clear idea of the industries which may properly be classed as home industries, and the functions of a department such as this in relation to them. The question may then be asked—how would the Department, if given the necessary authority and funds, propose to improve the condition of the people in the backward districts by (*a*) the encouragement of rural industries other than agriculture (the latter aspect of the question has been dealt with in his evidence before the Commission by my colleague, Professor Campbell), (*b*) the development of a system of technical education adapted to the needs of congested districts?

These two questions are closely related, but I shall endeavour as far as may be to deal with them separately. I take as admitted the pressing need for rural industries auxiliary to agriculture, and the necessity for stating a definite policy for their encouragement. In arriving at a policy there is available for guidance the experience gained in the various

schemes promoted by voluntary effort, by the Congested Districts Board, and by the Department.

TYPES OF RURAL INDUSTRY.

It appears to me to be of considerable importance to discriminate between the numerous forms of rural industry already carried on or capable of being introduced, with a view to judging of their economic aim and arriving at a decision as to the best methods of dealing with them.

A broad and useful distinction may be drawn between industries which seek to provide for the home itself what the home needs, and the expenses of the home rather than increasing its income : and those industries which aim chiefly at increasing the family income. The form of home industry which aims at producing in the home what the home needs has declined, and the woman of the house no longer knits, spins, or weaves for her family, and in many cases seldom sews. The remedy for this is to be found in properly directed educational effort.

Among those industries which aim at increasing the family earnings are lace and crochet-making, sprigging, embroidery, machine knitting, shirtmaking, hand spinning, hand-loom weaving, etc. This latter group may again be divided into two categories, (*a*) those which depend for their existence upon artistic merit, and do not enter into competition with the machine-made product, such as lace, crochet, embroidery, etc., and (*b*) those which enter into competition with the products of power-driven factories, such as machine knitting, hand spinning, and hand-loom weaving.

CONSIDERATIONS RESPECTING CERTAIN CLASSES OF HOME INDUSTRY.

Industries belonging to the first category, such as lace and crochet-making, sprigging, etc., have, owing largely to the aid given by the Congested Districts Board and the Department, greatly increased in recent years, and, in a number of cases, considerable assistance has been afforded by this supplementary aid to the income of the family. Two important considerations respecting it must, however, be borne in mind. The first is that the maintenance of these industries entails an expenditure of public money large in proportion to the earnings. While such an expenditure is only to be expected in the first year or two of the establishment of such industries, it might fairly be expected to diminish with increasing proficiency and earning power on the part of the workers. There is, however, unfortunately an enormous

wastage. It requires two years or more to make girls expert in such an industry as, say, crochet-making, during which time money has been expended upon their training, yet marriage or emigration in the majority of cases deprives the country of any industrial return on their training.

The second consideration is the danger that exclusive attention to such work on the part of girls who, in most cases, have only just finished, or have even not yet finished, their primary education, leads to a neglect of the ordinary duties of the home, the performance of which, though it does not directly increase the family income, makes for prosperity by diminishing unnecessary expenditure and raising the standard of home comfort. It would seem that an industrial class for girls, receiving aid from public funds, would form a welcome opportunity for securing training in household duties. As a matter of fact, however, the opportunity is not welcomed, and objections are raised against the introduction of instruction of this kind on the ground that it interferes with the earning power of the girls—in the case of lace-making, for instance, it has been stated that it “spoiled the hands” of the workers. It is not surprising that, where the success of a class is measured by the amount of money earned, this attitude should exist. The danger here indicated is briefly noticed in the Report of the Recess Committee (edition 1906), page 40, in a note dealing with the Report of the Sub-Commission of the Royal Commission on Technical Instruction. That Report states, “the true conception of Home Industries amongst an agricultural population—namely, that they should be the hand-maiden of agriculture and not its rival, a means of occupying agreeably and profitably in the home the time which cannot be given to the cultivation of the soil. And by profitable occupation is meant, not merely or simply the making of things which can be exchanged for money, but the making of things which would otherwise have to be bought with money, and which it is not only more profitable to buy with otherwise idle time, but which in the making of them confer upon the producer and his family circle a moral and intellectual profit not to be expressed in terms of cash, and not otherwise obtainable by them. It is well to emphasise this fact, and to point out that Home Industries indiscriminately pursued, like other good things, have their dangers. Experience has shown that many Home Industries . . . can lend themselves to two mischievous tendencies amongst others : (1) sweating in the home, a way of engaging all the members of the family, to the very youngest, in a feverish struggle to increase the scanty earnings of the industry, to the neglect of sanitation, of the education of the children,

and of the general comfort and happiness of the home : and (2) neglect of agriculture through the temptation to give more time to these industries than proper care of the farm justifies. The former tendency has shown itself a good deal in parts of Germany, the latter may be noted in parts of Switzerland."

Such a danger as I have referred to may be largely obviated by insisting that where money is given from public funds in aid of a home industry, it shall be a condition that domestic economy shall also be taught. This principle is adopted in the Department's scheme for Technical Schools for Girls, and might, with advantage, be extended as facilities for providing instruction in domestic economy are extended. Stress is laid upon the distinction between industries of an artistic character and those which seek to compete with the factory-made product. In the case of the former, with the safeguard mentioned above, every effort should be made to conserve and develop the industries, while, bearing in mind the fact that hope of permanence depends upon the artistic qualities of the products, and the individual character of the work, expert instruction of the highest character should, wherever possible, be given the workers in order to raise the character of the product. It is, however, important to bear in mind that this type of industry, producing, as it does, things which are not *essential* articles de luxe is peculiarly subject to the caprices of fashion, and so it is desirable that the training of the workers should be of a nature to enable them to adapt their work to changes of fashion. But when all possible has been done for the encouragement of such industries, the fundamental needs of congested districts will not have been met. To meet these needs, more highly organised industries must be introduced, industries producing the *necessaries* of life and yielding a higher wage with a shorter period of training than the industries just referred to.

LIMITATIONS OF HOME INDUSTRIES WHICH ENTER INTO COMPETITION WITH FACTORY-MADE PRODUCTS.

In the case of those industries belonging to the latter category (*b*) mentioned above much experience has already been gained, and it is clear that their operations as at present organised are very circumscribed.

So long as an industry such as machine knitting and shirt-making seeks only to supply the local market it may continue to exist and afford a limited amount of employment to local workers. When, however, it is sought to extend the industry by appealing to a wider market, in order to make it self-supporting, grave difficulties are experienced. The

products have now to reach a certain standard of quality and uniformity. They must be "marketed" in such a fashion as to compete with the products of highly organised factories and workshops; and the industry must be prepared to execute large orders rapidly and promptly. In order to satisfy these conditions, such equipment and labour-saving devices as are employed in factories must be obtained, and this in turn demands that while some of the work can be carried on at home, a large portion of it should be done under one roof where power may be employed and the advantages of organisation secured. The expenditure on plant, rent of buildings, and the wages of a manager, etc., now form "fixed charges" which demand a large and steady output in order to justify them, and we have arrived at something approaching the conditions of a factory.

But while one may point to large and successful factories even outside the large towns of Ireland, it is quite clear that large factories are, as a rule, entirely out of the question in rural districts. No objection, however, could be taken to employment in small factories if these could be successfully run. The question arises whether small factories, if established, have a reasonable chance of competing successfully with larger and more highly organised factories in England and elsewhere.

THE DIFFICULTIES IN THE WAY OF SMALL FACTORY INDUSTRIES IN RURAL DISTRICTS.

The difficulties under which such undertakings labour are: (1) the want of trained hands; (2) the difficulties in the way of favourable purchase of the raw materials, and in the distribution of products; (3) high freight charges; and (4) cost of power. So far as the want of trained hands is concerned, the difficulty may be largely met by the training afforded under schemes of technical instruction, as is the case at present in a number of centres.

The difficulties in regard to purchase of raw materials and the distribution of products can again be considerably lessened by Governmental assistance to schemes of a co-operative nature, fulfilling much the same functions as the "Rohstoffgenossenschaften" of Austria-Hungary, which are aided by a branch of the Imperial Department of Industry.

The cost of power is not the predominant factor, and there are solid reasons for believing that the introduction of suction gas plant and a possibility of employing Irish fuel will further reduce this difficulty.

ADVANTAGES OF SMALL FACTORY INDUSTRIES IN RURAL DISTRICTS.

Against the difficulties I have mentioned must be placed certain marked advantages, principal among which may be mentioned the cheapness of labour and (in many places) the possibility of obtaining premises at small cost. On the whole, I see no reason why small factory industries producing woollen goods, hosiery, etc., should not succeed in a large number of rural centres in Ireland, especially if their establishment is aided in the manner suggested. A study of industries already established under similar conditions elsewhere amply justifies this view. I am convinced, moreover, that development of industries auxiliary to the staple industry of agriculture, are essential to the prosperity of such districts, and I can see no reason why such products as hosiery, woollens, and many others should be imported in view of the large available labour supply, especially female, in many of the districts in question.

POLICY OF THE DEPARTMENT IN REGARD TO RURAL INDUSTRIES.

The assistance rendered by the Department to industries at present includes aid given to (a) agriculture and (b) industries other than agricultural. I shall confine my observations to the second group. Aid to them has taken the following forms :—

(1.) Affording *free expert advice* before the establishment of an industry and during its growth. This involves the employment of experts engaged in the industries in question.

(2.) The further *training of masters and foremen*. This is accomplished by

(a.) The courses of study at the Royal College of Science, the Metropolitan School of Art, and to these may be added the Technological Courses in such institutions as the Technical Schools in Belfast, Dublin, Cork, etc. These include organised courses in Engineering, Applied Chemistry, Weaving and Dyeing, Boot and Shoe Making, etc., Art Crafts such as Enamelling, Stained Glass Work, and Designing as applied to specific industries.

(b.) Scholarships of the value of £80 per annum to enable selected workers engaged in an industry to secure higher training in institutions providing special

courses of an approved character with a view to training them for the management of industrial concerns.

(c.) It is proposed to start, as soon as possible, centre courses for masters and foremen extending over three months or more, affording maintenance scholarships. These correspond to the *Meisterkursen* of Germany and Austria.

(3.) *The training of skilled workers.*—This is accomplished in the following different ways:—Outside the work of Technical and Trade Preparatory Schools for boys, the Department give aid as follows:—

(a.) By paying the salaries of qualified teachers engaged in the industry. This aid is sometimes given through County Schemes of Technical Instruction, sometimes by means of direct grants.

(b.) By granting to the industry a number of scholarships. These involve a payment to an approved industrial venture of sums in aid of the technical training of workers. Examples are afforded by the Shirt-making industry at Mullaghbawn, the Woollen industry of Kilkenny, and the Glove-making industry in Tipperary.

(c.) By the payment of three-fourths of the cost of maintaining apprenticeship classes in approved industries.

(d.) By the capitation system in “Technical Classes for Girls,” under which, in County Schemes of Technical Instruction, a sum of three pounds is paid under specified conditions on account of each of the first ten girls trained and two pounds on account of each additional worker.

(4.) Aid is further afforded by expert inspection of industries and through County Schemes by money grants and other assistance to Industrial Exhibitions.

The above are the methods now adopted by the Department. Want of funds prevents them meeting all the applications for aid, and the need for funds for the extension by them of such schemes in congested areas has already been mentioned in evidence by me.

It will be observed that the Department afford aid to private enterprise under these schemes, which are, in most cases, adequate to the end—that of stimulating and supplementing private enterprise. In backward rural districts, however, the Department recognise the necessity for stimulating private effort by exceptional means: indeed they freely

adopted this course in non-congested areas during the period in which the county schemes were being inaugurated, by making direct grants for various industrial purposes where the circumstances had been fully enquired into. They are fully convinced that such exceptional stimulus to private effort is called for in backward rural districts. Given the necessary funds, they would, as has been their practice in non-congested districts, be ready to administer direct aid to approved ventures, until the more systematic and generalised methods already described have had time to take effect.

The Department would, moreover, propose to assist the organisation of small rural industries by facilitating the supply of raw material on favourable terms and the distribution of produce.

PART II.

RURAL EDUCATION.

Although the question of the encouragement of industries dealt with in the first part of this article may be regarded as one of greater urgency, it depends upon and is closely connected with the problem of adapting technical instruction to the wants of a rural population. Unless this is done it is doubtful whether the most generous efforts in the direction of the development of industry can ever be successful.

It may be said, as in the case of rural industries, that the proposals contained in this part of the article are as suited to rural districts outside congested districts as to the scheduled areas. This is the case. The proposals are applicable in a general way to all rural districts. Backward and poor districts have, however, a prior claim to be dealt with, and would require special consideration in the establishment of rural industries. The same principles should apply inside and outside of congested areas, but the poverty of those areas demands preferential and generous treatment.

Concurrently with the extension of certain forms of technical training into congested districts, and the improvement of the conditions under which it is conferred, should proceed a reform for supplementing the instruction at present given in rural primary schools. The accomplishment of the first renders possible the second. The pressing need for this development will not be questioned. In the case of boys, it is essential that manual subjects should supplement the

literary ones, and that the education should be frankly adapted to the everyday needs of those taught.

We should make our scheme of education for rural districts deliberately rural, one definitely designed to fit the scholar for life on the land. Such a scheme is not incompatible with the desire to give the fullest opportunities to the country boy of exceptional merit to secure the higher education he may be capable of receiving. The fact remains that at present the education for a country boy is far too bookish, and too slightly related to the needs of his life after leaving school, that it is most calculated to attract him into the sphere of overcrowded and not too healthy occupations in the town than to cultivate a love for, and the ability worthily to follow, one of the group of occupations concerned with agriculture.

The defect to which I have referred to is most conspicuous in the almost entire absence of two subjects which have for their object the training of the youth's powers of observation, reasoning, and execution, and for bringing him into close and healthy relation with rural surroundings. I refer to instruction in Rural Economy and Manual Training. In regard to both these subjects, the main difficulty consists in want of training in this subject on the part of the teachers. In the case of Manual Instruction this difficulty is further supplemented by the absence of accommodation and equipment.

The aim should be to introduce in the higher classes of schools for boys instruction in the principles and practice of woodwork, treated educationally. The object to be aimed at is not to make the boys carpenters, but to train them in habits of industry, careful workmanship, and executive skill. Such habits must prove of great value to all boys, whatever may be their subsequent career in life.

A corresponding reform should be introduced into the upper standards of Girls' Schools, and would, doubtless, have been introduced before now had circumstances permitted it. The teaching of the various subjects connected with the management of a home should form part of the work of the upper standards of every girls' school. It will not be questioned that the need is great, and that every effort should be made to improve the standard of health and comfort in rural districts. Speaking generally, it seems clear that housewifery has declined, and that this is closely connected with the defects of our system of education. It is further recognised that health and physique are dependent upon suitable and properly prepared food.

There exists then a most pressing need for further instruction of a character designed to train girls for the duties of home life, and instruction in Cookery, Hygiene, and Domestic Economy should, as far as possible, be made compulsory on the elder girls at school. Strong efforts have already been made to extend the teaching of Domestic Economy for girls who have left the Primary School; and the Department have, through County and Urban Committees of Technical Instruction, established "Itinerant" Courses of Instruction over the country. But however much this system may be developed, it cannot wholly meet the difficulty. The instruction to be effective must be commenced in the Primary School. I have every reason to believe that the primary education authorities share this view, and that nothing but the difficulties in the way of extending this instruction prevents its being done. These difficulties can, I believe, be overcome by co-ordinated action between the Department and the Board of National Education.

I should like, however, to make it clear that, while in my opinion these educational developments are nothing short of essential to a healthy condition of rural life, I do not regard them as a panacea for the ills of congested districts, or as doing more than aiding a solution of the problems with which the Commission is confronted. I am quite satisfied from my own observation that in many instances a condition precedent to any permanent improvement is the removal of the people from their present cabins to healthier and cleaner homesteads. The benefits which might be expected from such migration, however, would only be transient unless accompanied by a sound and practical scheme of education.

In my evidence before the Commission I gave particulars of the work at present undertaken by the Department in congested areas. I pointed out that while such work was successful as far as it went, a due and reasonable development of it was rendered impossible owing to the absence of financial provision for the work, and that such work could only be developed at the expense of funds already allocated to non-congested districts, funds which were proving insufficient for their needs alone. The system of itinerant instruction in Domestic Economy, Manual Instruction, and Home Industries has succeeded, and a large and increasing number of courses in these subjects have been held since the Department were empowered to extend their work into congested areas. One of the greatest difficulties encountered, however, is, as I have said, the want, in rural districts, of suitable premises in which to hold these courses. It is not possible, with the present unsatisfactory accommodation, to inculcate

those lessons either in regard to domestic teaching or manual instruction which it is one of the principal objects of such instruction to afford. It is, moreover, clearly desirable in a number of centres to organise courses of a more permanent character, and to allow teachers in both subjects to remain in a centre for a longer period than is at present possible. Another grave difficulty is that young people of both sexes coming to receive instruction in these courses have received no preliminary teaching in the subjects taught.

The Primary Schools in these districts are almost without exception, lacking in the accommodation necessary for teaching of this character, and the teachers are not at present qualified to undertake it. The Department, acting under the restriction in the definition of technical instruction contained in the Agriculture and Technical Instruction Act (Ireland), 1899, admit to their classes only National scholars who are over fourteen years of age, or who are in the Sixth Class of a National School, and do not admit them in any case to attend such classes if these meet during Primary School hours. This restriction is necessary to safeguard the slender funds available for technical instruction under the Act for the definite purpose for which they were provided, but if funds are provided for the purpose in question, the Department have power to apply them under Section 2 (1) (c) of the Act.

A PROPOSAL FOR REMEDYING THESE DEFECTS.

The definite proposal is this: To establish in suitable centres where itinerant courses have been successful or might be successful, a *rural training centre* for adult evening classes, consisting of a kitchen for the teaching of Domestic Economy, a room for the teaching of Manual Instruction, and in some cases an additional class-room to be available for (a) lectures and classes in agricultural or other technical subjects and (b) the teaching of Home Industries. The cost of building and equipping such a centre would be approximately £400 (varying with the locality and the plan). The establishment of such centres of technical instruction for those who have left the Primary School is justified by the experience gained in the Itinerant Schemes conducted by the Department, which, for their proper development, require the provision of these centres. The centres would be maintained by the County Technical Committees, whose funds would be increased so as to enable them to allocate to each a teacher of Domestic Economy for, say, six months in the year and a manual instructor for a similar period. The local administrative machinery for carrying out such a needed development is

already in existence, and plenty of the right type of students are ready and anxious to learn. The value of the part such a centre would play in the life of a rural district cannot be over-estimated.

Not only would these rural economy centres serve to meet the pressing need of accommodation for evening classes for adult scholars, but they would also serve to provide a remedy for the defect in primary education in rural districts to which I have already referred—the lack of training in home duties for girls and of training in manual instruction for boys. Such instruction as is desirable in the lower standards (say up to Standard V.) should be given by the National teachers, and, where they are qualified, and accommodation exists, the instruction may be given in even the higher standards. But the accommodation scarcely exists, and almost insuperable difficulties appear in the way of providing it, except in the manner here proposed. The conditions which existed in Ireland have led to the establishment of a very large number of very small schools, having such small numbers in the upper classes that the provision in them of the necessary special accommodation for instruction in domestic economy or manual instruction cannot be justified.

The obvious way out of the difficulty is the adoption of the “Centre” system. The scholars from the upper standards of neighbouring National Schools would, where possible, attend the “rural training” centre for instruction by the special teachers in domestic economy (in the case of girls) and for manual instruction (in the case of boys) for, say, one school meeting in each week during the six months that the teacher is in the district.

In cases where accommodation already exists in the National School, and where the number of scholars in the higher standards warrants such a course, the special teacher might give the lesson in the National School.

The question of the distance from the schools to the rural training centre is important. An examination of the distribution and position of National Schools in congested areas, however, shows the possibility of establishing, in a large number of districts, centres which would serve four, five, or more National Schools within a radius of about two miles. It is proposed to proceed tentatively, and in accordance with the ascertained needs of the districts, commencing with a few centres for adult evening classes, and making them available for the upper standards of National schools where conditions are favourable. Naturally the first centres to be established would be where the local conditions were most favourable. It is considered desirable at the

present time to estimate for thirty centres, although such a number would ultimately be found insufficient for the areas at present scheduled as congested.

NO "OVERLAPPING" INVOLVED.

This proposal involves no overlapping with the operations of the Board of National Education. On the other hand, it constitutes an effort towards co-ordinating the system of technical education with the work of the National Board. The principle was approved by the Consultative Committee of Education, consisting of representatives of the National Education Board, the Intermediate Education Board, and the Department, as far back as June 19th, 1905. The National Education Board also accepted the principle, and in the introduction to their Programme of Instruction, issued to come into operation on 1st April, 1904, is the statement:—"In the Fifth and higher standards, provision for instruction in Cookery, Laundry, Domestic Economy, and Manual Instruction in Wood and Metal has been undertaken by the Department of Agriculture and Technical Instruction. Instruction in these subjects will be provided for the higher standards of ordinary National Schools in day classes at Central Technical Schools, or in rural districts by means of itinerant instructors." The lack of funds alone prevents the Department taking in hand this work in the manner here described.

It is not necessary to burden this article with details of programmes or syllabuses, but it may be important to lay down the principles that should characterise this extension of domestic economy teaching in rural districts. This is more particularly called for as some reform in the methods of teaching domestic economy, in the direction of adapting this teaching to the everyday needs of those taught, is no less important than the extension of the teaching. Harm has been wrought by a too sharp division of Housewifery into the subjects of Cookery, Needlework, and Laundry Work. The teaching should include simple practical lessons in the cooking of cheap and wholesome foods such as are obtainable in the districts dealt with, and are within the means of the families of those taught. One great object is to develop the habit of thrift, and the cost of everything should always be set down and considered in relation to small incomes. The simple processes necessary in cottage households should be, moreover, repeated again and again in order to make them habitual. The equipment would be simple and similar to that available in the pupils' own homes. The instruction should also be directed to the cultivation of a sense of duty

and responsibility in regard to the smallest tasks, and the formation of those habits of mind and body which characterise a good housewife.

Instruction would be given in simple household operations, in home sewing, and in washing. Equally important would be the introduction of instruction in other matters which concern the health of the home. The necessity of ventilation, the effect of damp clothes, the need of pure water, the necessity of personal cleanliness, and for the removal of refuse; the washing, dressing, and feeding of young children, and the prevention, recognition, and treatment of their more common ailments. Plainly-worded instruction on simple treatment in cases of accident, and management in cases of sickness, will also form part of the course. The test of the efficiency of the teaching would be its applicability to the needs of the home.

As regards Manual Instruction, the work would include the use of all the more common tools, and the nature and uses of the more common timbers. The use of these tools in woodworking would be dealt with by employing the more common joints in the construction of boxes, beehives, stools, gates, etc., and the whole associated with Applied Drawing. The value of such instruction is so universally recognised that it would be superfluous to dwell on the point. Its importance in cultivating useful habits and resourcefulness on the part of those who are about to leave, or who have left school, cannot be over-estimated.

A further proposal involves the introduction into National Schools of a form of instruction now rarely met with, but much to be desired—a form of instruction which is not the teaching of agriculture, but which would form an admirable preparation for the agricultural education of all those who are to live on the land. This knowledge of the common things of every-day rural life has been called “Nature Knowledge,” but the term has also been applied to a type of instruction not contemplated here.

The course of instruction would aim at cultivating the scholars’ interest and powers of observation in regard to the growth of plants from the seed, the nature of soils in relation to plant life, the purpose of agricultural operations—it would, in short, aim at giving simple but thorough scientific instruction by means of the common things of the country.

Properly taught, such a subject will be as truly educational as any in the curriculum. It is believed that it would be gladly welcomed by all responsible for primary education, and that the main difficulty in the way of its introduction is the want of training in this direction on the

part of the teachers : for in order to be successful, the work would need to be done by the regular teachers of National Schools, and co-ordinated with the other subjects of the curriculum.

SUGGESTION FOR THE ENCOURAGEMENT OF THE TEACHING OF RURAL ECONOMY.

The definite suggestion I would make is that the Department should, as part of their summer courses for the further training of teachers, organise courses in Rural Economy on the lines laid down. The teachers thus trained would, in the various technical schools of the country, then develop the existing Science Courses for teachers of National Schools, modifying those courses for rural teachers in the direction indicated. Assistance, moreover, would be rendered by the Department's experts (as is now the case in some instances) in the establishment and maintenance of school gardens, which may be regarded as a necessary adjunct to such a programme of work.

SUMMARY OF PROPOSALS.

The proposals made in the preceding paragraphs are summarised below :—

- (1.) Further aid to approved rural industries in congested districts in the manner described.
- (2.) A further extension into congested districts of the Department's schemes of technical instruction in non-agricultural subjects ; and the establishment of permanent centres of instruction.
- (3.) Co-ordinated action with the Board of National Education with a view to supplementing Primary education in the upper standards of National Schools by affording facilities for instruction in Domestic Economy for girls, and Manual Instruction for boys.
- (4.) The provision of supplementary training for National Teachers in the subject of Rural Economy.

Home Industries in other Countries and their Importance.

By the Rev. P. J. DOWLING, C.M.

BY Home Industries are understood industries that can be carried on in the homes of the people, either by purely manual labour or by the use of small machinery and power.

A glance of what such industries are capable of effecting in the production of wealth should help to rouse the attention and sympathetic help of all who are interested in the well-being of Ireland. It is idle to talk of the drain of emigration unless we can offer a means of livelihood to our people. Emigration, in great part, is a proof that our people cannot live at home, and, until we put a means of livelihood at their disposal, it is foolish to urge them to remain at home to strive to live in such poor circumstances that they may be said to barely exist, and not to live in the full sense of the word. One of the great agencies that prevent emigration and help to enable the people to cling to their native land in other countries is the successful working of home industries. If the average peasant or artisan in Switzerland, Belgium, France, Germany, Russia, was dependent on his personal earnings alone, he would quit his country just as readily as the Irishman. But in all these lands the wage earning is not confined to the man of the house. His wife, sons and daughters, down almost to the little toddler, are all taking a share in the work, and all contributing their mite to the maintenance of the home—a state of affairs prevails which is known in Ireland only in factory districts of the North of Ireland. There the father, mother, sons and daughters are all earning, so that a home which would be dependent on a pound or twenty-five shillings a week in other districts has a steady income of from two to three pounds a week. There are isolated cases in other parts of Ireland where the home industry has been taken up and where similar results have been attained. The writer knows of one labouring man who with the pay for his own hired labour, with the product of his plot and with the earnings of his wife and daughters for poultry, eggs, honey, and lace, the total income runs up to £120 per year.

A glance now at the home industries of some countries will show what an important part they play.

In Continental countries, particularly in those where the population is dense, the average peasant can have but little land. If he had nothing else to support him but the land

and its direct products there would be many an uneconomic holding in Belgium, France, Switzerland, and other countries where the uneconomic holding is unknown. The holding is saved from the appellation by the home industries of the owner. All possible trades are to be found in these homes. There will be seen workers in wood, in metal, in bone, india rubber, etc. The women work at lace and embroidery, and even the old people have some easy task to employ their fingers, and to save them from the reproach of consuming only and not creating. The advantage of such a method appears particularly in the winter months, when but for some such occupation their would be simply idle hands and idle mouths to fill.

In France half the population live on agriculture, but it is of that intensive kind that really makes it different from what we are acquainted with, and might be almost called a home industry—it demands and gets the assistance of every hand that can work. A fourth of the population is supported by industry, and this fourth may be equally divided between the great industries and the small ones. There are at least 1,500,000 workers engaged in the latter, and that means not only their support, but the support of those dependent on them, which would make a total of from four to five millions dependent on home industries—in other words, a number more than the whole population of Ireland. A glance at some of the industries and figures should prove interesting. From Romorantin in Loire-et-Cher to Argentan and Le Blanc there is one immense workshop, where handkerchiefs are embroidered, and shirts, cuffs, collars and all sorts of ladies' linen are sewn and embroidered. There is not a house where the women are not earning money at that trade. At Fougères to the north-east of Rheims, thousands of women are engaged in sewing boot uppers and embroidering fancy shoes. Even the making of cardboard boxes for the boots is a big industry. Tinchebrai is a great centre for small goods in iron, mother-of-pearl, and horn. Around Solesmes you have whole villages that live on polishing small marble ornaments. Ardouin Dumazet, a writer who has made a special study of home industries, states that in the Village of Fresnaye there is not a house in which wooden goods are not made. The variety is bewildering: Spoons, salt boxes, scales, bobbins for weavers, wooden measures and funnels, mouse traps, clothes pegs, spoons for jam and salad, etc. Every house has its turning lathe, or some other tools for dealing with wood. The earnings are not high, but each worker owns his house and garden, and occasionally a plot of ground. For many miles on both sides of the Loire old men and

women and the children help to earn by sewing buttons on to pieces of cardboard. I could multiply instances, but shall pass on to other countries.

In Germany whole areas of country are devoted to small industries, such as toy making, wood carving, lace making, straw plaiting, clock making, cardboard box making, silk weaving, pottery, etc. In the clock country, 90 parishes, nearly 13,500 people are engaged in the making of clocks. In Lahr, north of Freiburg, over 2,000 hands are wholly or partially employed in cardboard box making. The following may be quoted as a proof of the part home industries play in Germany:—"We found populous and thriving villages, filled with busy workers, in districts remote from railways and where carriage and transport must be matters of extreme difficulty, and in parts of the country, moreover, where agricultural work would, in many cases, be wholly insufficient to provide support for more than a small proportion of the present population."—Commission on Technical Instruction, 1884, Vol. I., p. 549. In other words, without these home industries large numbers of these villagers should have emigrated.

In Belgium, no matter what line of commerce we consider, the *petit industriel* and his *collaborateur*, the man who works at the home industries bring in a big share of the nation's wealth. The productivity of Belgium amounts to nearly £250 per head, and yet out of nearly 300,000 workers about 133,000 are engaged in little industries, such as are carried on in the home. Russia is a very telling example to quote in favour of small industries. There are 7,500,000 of the population in European Russia engaged in domestic trades and industries, and the annual output reaches the surprising figure of £200,000,000!!! To make a comparison; the home industries of Russia produce the same amount of wealth as the whole export and import trade of Ireland. If we could get our people to take up this line of activity to an equal degree, we should increase the wealth of Ireland by one hundred millions a year!

Of Switzerland, and the help that home industries afford her people, it is hard to present an adequate description. There are but 5,400,000 acres of production land—a third of what we have in Ireland, and yet on the 30th June, 1905, this land supported a population of 3,459,000. Switzerland sends products to the value of nearly thirty-eight millions to other countries. According to a French economist the secret of Swiss prosperity is the happy union of agricultural life with home industries. The Swiss farmer is a wood carver, a maker of parts of watches, or a toy maker. His

wife and daughters help him either in finishing his work, or earn money by lace making, fancy weaving, embroidery, etc., and all these streamlets make a tidy income for the Swiss home. To quote one instance of the readiness with which the Swiss take up a new method of earning. Wood carving was introduced into Berne in 1819, and now it gives occupation to nearly 8,000 persons.

There are many things imported into Ireland to-day which could easily form the object of organised home industries. The present makers of these goods have no monopoly, and their only advantage lies in the inaction of our people in respect of these manufactures. From a subjoined list we can learn that the horns of our Irish cattle go to France and return to us in the shape of combs and other articles. Why not make the combs on the spot? The shops in every country town, not to mention our cities, display articles in wood, leather, fancy marbles, etc., all of which could be made at home. On artificial flowers alone a large sum leaves Ireland that should remain at home if this trade were introduced into some Irish homes. Already the Tipperary glove trade has been started, and the Wexford straw hat is also capturing a field once left to the foreigner. The fact of any article being imported shows that there is a market for it, and it should also urge the Irishman to two things—first, to supply that market by home product; and secondly, strive, if possible, to reverse the currents and supply the foreigner with Irish manufacture.

Hitherto I have addressed myself to the purely material aspect of the movement. But any true patriot knows there is a higher view to take of the propaganda in favour of home industries, and that is the moral and social effect of them. All writers and travellers agree that these industries carry with them a number of qualities of priceless value. In the first place, you cannot have such industries without order and regularity in the home. The hand and eye get a training that shows itself in the dress and surroundings of the worker. In particular, such trades as lace making, embroidery, shirt making, force order and cleanliness on the house where they are carried on. Then, a great sense of self-respect and self-reliance comes to the man or woman who feels that the bread that is eaten is not idle bread. The idler in a home, who is a kind of parasite on the worker, must have a very low standard of self-appraisal, and must feel very sharply the contrast between himself and the worker. Frugality, too, is begotten in such a home. The material must be husbanded, the profits are small, every suspicion of waste must be checked, and all this makes the mind of a frugal bent.

These are some of the good effects, moral and social, that come in the train of such industries as we advocate.

To conclude, those who have influence over our people should always impress on them that Providence always intended a people to live in their own land. We have here a land worth prizing, with many advantages unknown in other countries. The story of big earnings should not deceive our people, because where there are big earnings there is big expenditure. The French and the Belgian and the German are not tempted by such siren songs. They live their quiet happy life, and can put aside proportionately as much as the Englishman and more than the American. Our earnest wish should be that the day will come when the humblest Irishman in his home will feel that his own hand and that of wife and children are all weaving together the fabric of social happiness, and that undisturbed by war's alarm and untouched by the fierce commercial stress that rules life beyond the seas, he spends his days in that peace and calm which alone can bless a home.

Small Industries and Industrial Villages.

ENGLAND.

INDUSTRY.

Sheffield	..	..	Cabinet makers, toy makers.
Birmingham	..	..	Women embroiderers of boot and shoe "uppers," weaving, workers in wood, metals, bone, and India rubber. (These trades are all worked at in homes of people).
Sheffield	..	..	Cutler works in small workshop with wheel power. In textile trades weaving is often done by family.
Lake District	..	..	Hoop makers, basket trade, charcoal burners, bobbin makers; small iron factories working with charcoal at Blackbarrow.
South Staffordshire, Derbyshire.			Nail industry.
Redditch	..	..	Best needles made by hand.
Dudley and Cradley	..	..	Chains made by hand.
Walsall, Wolverhampton, Willenhall.			Lock trade.
Walsall	..	..	Bits, spurs and bridles made by hand.

Birmingham	Gun and rifle trades.
Buckingham, Oxford, Bedford.	Dress materials, etc.
Villages of Nottingham, Derby and Leicester.	Hosiery.
Villages of Sussex and Hampshire.	London firms send cloth to be made into articles of dress.
Around Luton, and in many parts of the country.	Straw plaiting and hat making.
Northampton, Leicester, Ipswich, Stafford.	Shoemaking; women and girls sew "uppers" in own homes.
Whitechapel and Southwark (London), suburbs of big cities of Great Britain.	Clothing and furniture.

FRANCE.

Cholet (in Maine-et-Loire)	Linen handkerchiefs.
From Romorantin to Argenton and Le Blanc.	Women and girls embroider handkerchiefs, etc.
Elboeuf (Normandy) ..	Clothing.
Fougères (Ille et Vilaine), near Rheims.	Women are employed at home in sewing "uppers" and embroidering ladies' shoes; also in making cardboard boxes and wooden heels.
Quimperlé (Brittany) ..	Felt hat industry.
Hennebont (South Coast of Brittany).	Tinware, tanneries, potteries; slags manufactured into manure.
Normandy, Departments of Eure and Orne.	Brass goods, hardware, nails, lockets.
Tinchebrai (West of Flers)	Small goods in iron, mother-of-pearl and horn.
Solesmes vicinity. ..	Marble work; Wood industries.
Fresnaye and district. ..	Wood industries.
Neufchâtel	Wooden shoe making.
Jupilles	Tapes, boxes of different kinds, wooden shoes.
Near the Forest of Vilbraye.	Umbrella handles.
Nièvre (centre of France), Haute Marne (East of France).	Agricultural machinery.
Guérigny and Fourchambault.	Chemical produce, potteries.
Nevers (Valley of Loire)	High-class pottery.

Gien	..	Buttons, from feldspar cemented with milk.
Nogent, Haute Marne	..	Artistic cutlery.
Thiers, Puy de Dôme	..	Inferior sorts of cutlery.
Departments of Aisne and Haute Marne...	..	Basket makers.
French Jura	..	Watch trade.
Nantua and Cluse (Jura)	..	Silk weaving.
Oyonnax	..	Comb manufacture, from Irish horn and French celluloid ; cardboard box making.
St. Claude and villages adjacent.		Briar pipe-making, amber and horn mouthpieces, sheaths, etc ; factory where metric measures are made ; diamond and precious stone cutting ; oak bark preparation for tanning purposes.
Loire	..	Hat making.
Ardèche	..	Stationery.
Doubs	..	Hardware.
Isère	..	Glove making.
Oise	..	Broom and brush making.
Troyes	..	House machine knitting.
Croix Rousse, Lyons	..	Silk weavers.
L'Arbresles, Lyons	..	Silks and velvets.
Pannissières	..	Linen and silks.
Tarare	..	Muslins and embroidery of same.
Beaujolais and the Forez	..	Woollens, muslin embroidery.
Amplepuis, Thizy	..	Silks and muslins, linings, flannels, peruvian serges, etc.
Roanne	..	Cottons, flannelettes, silk blankets, fancy knitting.
Cours	..	Cheap blanket trade for export to Brazil.
St. Etienne et St. Chamond		Silk ribbon weaving.
St. Etienne, Le Chambon, Firminy, Rive de Giers and St. Bonnet le Chateau		Hardware.

Petty Trades in and around Paris.

Linen, shoes, gloves and corset making ; engraving, book-binding, all kinds of fancy stationery ; manufacture of musical instruments, also mathematical instruments ; basket making ; brush making ; furniture ; jewellery ; artificial flower making ;

carriage and saddlery trades; fine straw hat making; glass cutting; painting on glass and china; making fancy buttons; small goods in bone and horn.

RUSSIA.

Orenburg	Agricultural machinery.
Villages round Moscow ..	Printed cottons, silk hats, "Vienna" furniture.
Vorsna and Pavlovo ..	Cutlery.
Stavropol Government, North Caucasus.	Silk weaving.

Food Supply and Cost of Living.

Country	Average annual cost of food and beverage	Ratio of cost of food to earnings.	Days' earnings equal to annual cost of food
	£ s. d.	per cent.	days
United Kingdom	14 4 9	42·2	127
France	12 4 5	44·0	142
Germany	10 18 5	49·1	148
Russia	5 19 7	52·0	156
Austria	7 17 4	50·8	152
Italy	6 4 10	51·2	153
Spain	8 9 0	51·2	154
Portugal	7 3 0	59·1	177
Sweden	9 18 11	45·2	136
Norway	9 15 0	47·6	143
Denmark	11 14 0	36·0	108
Holland	10 8 0	46·0	138
Belgium	12 3 1	43·4	130
Switzerland	8 11 7	45·2	135
Australia	20 7 0	44·4	133



FRANCE.



ESPARTO—SHOEMAKING. OLORON, ST. MARIE.



DRESSMAKING. ANGOULÊME.

The Machine Sewing Industry in Belgium and Germany.

Information specially collected and compiled by
THE SINGER SEWING MACHINE COMPANY.

BELGIUM.

INDUSTRIES in Belgium have of late years greatly developed, and there are now many Foundries, Glass Works, Engine and Carriage Building Works, Spinning Mills, Textile Factories, etc., all indicating industrial life and prosperity. It can, therefore, be easily understood that in such a prosperous country there is no lack of employment, and the workpeople find a ready means of earning a comfortable living.

There are, however, agricultural districts where no industry whatever existed some twenty years ago; the people, both men and women, laboured in the fields, tilling the ground, or were otherwise employed on the farms, and if poverty did not prevail in these parts at that period, it is nevertheless certain that a number of the people had to struggle hard for a living. This situation, however, has changed since the manufacture of Corsets, Shirts, Clothing and Boots and Shoes has been introduced and developed.

Certain manufacturers and employers have established workshops in many of the districts, where a large number of men and women are to be found working conjointly; but besides these there are numerous workpeople who work altogether at home.

There are also so-called manufacturers who have neither factory nor workshop of any kind, and who place all the work outside for execution at the homes. In this manner has been instituted what is called here "l'Industrie à Domicile," and in England "The Home Industry."

The Home Industry has developed rapidly in some parts of Belgium, and it can incontestably be stated that it has contributed a good deal towards improving the lot of the people where it has been introduced.

It is principally the women who now, thanks to the Home Industry, earn more money than formerly. In the households where the husband does not work at the sewing machine, he follows a trade, works at a factory, or is employed on the State railways, or otherwise, and in these cases the wife herself utilises the sewing machine at home. If she has no daughters able to work with her, she is often helped by an assistant—a non-experienced hand, or an apprentice. If, on the contrary, she has one or more

daughters, they will follow the same occupation and do as much work as their mother, so much so that two or three sewing machines are sometimes to be seen working in one household. This work done at home by several members of the same family evidently brings in a good income, and permits of comforts which were unknown before the Home Industry was introduced into these parts.

We give below some particulars concerning certain districts where Home Industries are carried on, the wages earned, etc., and we might add that in these places the married workman nearly always lives with his family in a cottage composed of from two to four rooms, and with a small kitchen garden attached. A large number of the workmen are their own landlords, for here the working class are given exceptional facilities for the acquisition and the building of their homes.

We have chosen the most interesting places, and begin with :—

Binche (Population 12,078), Province of Hainaut.

CLOTHING.

Here the making-up of boys' and men's clothing is carried on extensively, the operators chiefly using Singer's 16K36 machine for Tailoring. In this town there are only a few Clothing Factories: the greater portion of the work being placed outside.

The number of tailors working at home may be calculated at well over 1,000—say 600 men and 400 women; thus, if we reckon three tailors per household (father, mother and son or daughter), there are at Binche more than 300 families living solely by making-up clothing at home. Besides the members of the family, certain tailors employ an apprentice or an assistant—a non-experienced hand, who does the tacking, button-sewing, fitting of linings, and is at other times occupied in carrying the work to and fro between the workers' home and the manufacturer or employer.

At Binche they make the medium and cheaper kind of clothing, the better quality being rarely seen.

The readymade clothing is sold by the manufacturers or employers to the wholesale houses and to the clothing firms in the country and on the French frontier. The export trade to all parts of France and Switzerland, which was carried on some years since, has quite disappeared on account of the imposition of increased Custom duties. Nevertheless the output in Belgium alone is rather important.

The tailors working at their homes may be classed as follows :—

The coat-maker, who only makes the coat or jacket of the suit ; also the overcoat.

The trousers-maker, who makes only the trousers.

The vest-makers, principally women, who make the waistcoat.

These last-mentioned also make the capes and the padding of overcoats.

Recently some little attention has been given to the making of ladies' jackets, but in this line not much progress has yet been made.



READYMADE CLOTHING.—BINCHE.

WAGES —A working tailor, together with his wife and an extra non-experienced hand, can earn from Frs. 60 to Frs. 65 per week (about 47s. 6d. to 51s. 6d.) when trade is good. From that must be deducted Frs. 7.50 to Frs. 9 (6s. to 7s. 2d.) for the extra hand, and Frs. 2.50 to Frs. 3.00 (2s. to 2s. 4d.) for accessories (thread), so that the net earnings during such times can reach about Frs. 50 to Frs. 53 per week (39s. 6d. to 42s.).

During the slack season the earnings of the same tailor, working with his wife and assistant, do not exceed Frs. 20 to Frs. 30 per week (15s. 9d. to 23s. 9d.). The Frs. 7.50 to Frs. 9 (6s. to 7s. 2d.) for the assistant must always be deducted (the wages of this latter being always the same),

and in addition to that Frs. 1.50 (1s. 2d.) at most for the sewing accessories.

Some tailors are able to earn during the good season from Frs. 80 to Frs. 100 (about 63s. to 79s.) per week : but in these cases they work conjointly with their wives and daughters and possess three, and sometimes four sewing machines. The amount of wages depends also on the ability and diligence of the workers.

SEASONS AND WORKING HOURS.—The busy season generally lasts eight months, and the slack season four.

During the good season they work on an average 13 hours per day. In slack season they are occupied only when work is obtainable, so during such times no fixed working hours can be stipulated.

BOOTS AND SHOES.

The manufacture of boots and shoes is also carried on at Binche, the stitching of boot-uppers likewise finding place among the Home Industries ; this work being chiefly executed by women, either married or single, who work with an apprentice. A woman or girl so occupied receives from 30 to 40 centimes (3d. to 4d.) per pair of uppers, but must find her own sewing thread. The button-holes are not done by these workwomen, but are hand-stitched by others, who make a speciality of this work, and are paid from one to one and a-half centimes per button-hole ($\frac{1}{10}$ to $\frac{3}{20}$ of a penny). The number of people working under the afore-mentioned conditions at their homes on boot stitching is calculated at 125.

Their weekly earnings amount from Frs. 15 to Frs. 20 (about 12s. to 16s.) during the good season, and their working day at these times is 13 hours.

Some of the more skilful workers occupied in stitching better class shoes make better money. In slack season, however, their earnings are reduced to Frs. 12, Frs. 10 and Frs. 8 per week (about 9s. 6d., 8s. and 6s. 3d.). From these sums must be deducted Frs. 1.80 to Frs. 2.40 per week (about 1s. 6d. to 2s.) (30 to 40 centimes per day) for the apprentice's wages, which remain the same in all seasons ; also Fr. 1 to Frs. 1.50 (9d. to 1s. 2d.) is to be calculated for thread.

Like the clothing industry, the good boot and shoe season lasts eight months, and the slack season four months.

For information we give the following statement of wages paid from Dec. 27th, '06, to Feb. 7th, '07—a period of seven

weeks—to a good workwoman on superior boot and shoe work :—

Dec. 27th, '06	Frs. 19.40	Jan. 24th	Frs. 29.30
Jan. 3rd, '07	„ 15.25	Jan. 31st	„ 24.95
Jan. 10th	„ 25.90	Feb. 7th	„ 24.70
Jan. 17th	„ 23.95		

A weekly average of Frs. 23.35 (about 18s. 6d.).

Another one, not so skilful, occupied in medium-class work earned :—

May 11th, '06	Frs. 21.52	June 1st	Frs. 6.75
May 18th	„ 10.30	June 8th	„ 10.40
May 25th	„ 8.72	June 15th	„ 24.20
		June 22nd	„ 17.11

An average of Frs. 14.14 per week (about 11s. 2d.).

Like the tailors, the people engaged in stitching boot-uppers have to collect and return their own work to the manufacturer.

Rents are rather high at Binche. A working family pay there from Frs. 19 to Frs. 23 per month (about 15s. to 18s.) for a small cottage of two or three rooms, with back yard or small garden attached. A few of the work-people stay in lodgings, consisting of one or two rooms in houses situated in centre of the town. These are generally bachelors, or families where there are no children. The rent in the latter cases varies from Frs. 7 to Frs. 12 per month (5s. 6d. to 9s. 6d.).

Courtrai (Population 34,760) Western Flanders.

CLOTHING.

Here “The Home Industry” consists of making-up men's clothing. The clothing factories have no stitching department, the work being placed outside. There are about five large firms who give their work to about 550 work-people, comprising 500 female and 50 male tailors, all working at their homes.

A few years ago the manufacture of clothing was entirely undertaken by men, but in consequence of differences between the masters and workmen, they eventually decided to have the work done by women; and this has been far more satisfactory. The article manufactured at Courtrai is generally of common quality, and the greater portion of the clothing is made without lining.

The women are invariably assisted by an apprentice, and they stitch the trousers, waistcoats and coats as well as the overcoats. The number of men tailors being but small, they give their attention only to clothing of superior quality.

During the good season a clothing seamstress earns from Frs. 12 to Frs. 15 per week (about 9s. 6d. to 11s. 10d.), from which must be deducted Frs. 1.50 (1s. 2d.) for sewing accessories (thread). In the slack season the earnings are considerably reduced, and as there is about as much bad season as there is good, the average weekly earnings of one of these workers, taking all the year round, hardly exceeds Frs. 10 (about 8s.). Then as to the married woman who has to devote two or three hours daily to her household duties, this weekly wage will be diminished to Frs. 7.50 (about 6s.).

The work is always collected and returned to the manufacturer by the worker or by the apprentice.

The button-holes are hand-sewn by women making a speciality of this work; they also stitch on the buttons, and earn about Frs. 15 per week (11s. 10d.), less the cost of the thread, which amounts to, say, Fr. 1 (9½d.).

As there are not many people occupied in this line, they find a regular supply of work nearly all the year round.

Two of the manufacturers use Buttonhole Machines No. 23-8, and so have no need of these home workers.

The apprentices are generally not paid any wages. In some homes the mother works with one of her daughters, which, consequently, increases the earnings.

Every working family at Courtrai dwells in a cottage of a monthly rental of Frs. 14 to Frs. 15 (about 11s. to 12s.).

Hereunder we give examples of wages earned :—

1. The family is composed of father, mother, daughter and four young children. The daughter makes drill trousers, hoods and coats, and for her labour she is paid at the rate of 15 centimes (1½d.) per trousers, 25 centimes (2½d.) per hood, and 20 centimes (2d.) per coat; the article being unlined. She so earns from Frs. 7.50 to Frs. 9 per week (about 6s. to 7s. 3d.). The mother gives her time to the household work, and the father follows some employment or other, earning Frs. 15 per week (11s. 10d.). They live in a small cottage situated in a by-street, with a monthly rent of Frs. 10 (8s.).
2. Man and wife (newly married). The wife is occupied in making waistcoats, and earns on an average Frs. 18 per week (14s. 3d.). The thread costing her Frs. 1.70 (1s. 4d.), leaves a net gain of Frs. 16.30 (about 13s.) She has a constant supply of work, and is assisted by an apprentice who is not

paid any wages, and who fetches and takes back the work. The husband is employed by the Singer Co. as salesman-collector.

3. Family: Father, mother, three sons and four daughters. Two of the daughters give their time to coat-making, and are constantly provided with work. They labour from six o'clock in the morning till 8 o'clock in the evening, their combined earnings amounting to Frs. 30 per week (23s. 8d.), and deducting Frs. 3.50 (2s. 9d.) for thread, leaves them a net gain of Frs. 26.50 (about 21s.). The other two daughters go to school. The father and one of the sons are employed in selling papers, which brings them in together Frs. 30 per week (23s. 8d.). Another of the sons, apprenticed to a baker, earns Frs. 25 per month (19s. 9d.), with his board and lodgings found. The third son is still at school. The family reside in a small house of Frs. 21 (16s. 8d.) monthly rental.

Two girls engaged in making bar button-holes and sewing on buttons to clothing can do 12 trousers per hour, at the rate of 3 centimes each ($\frac{3}{10}$ of a penny), or ten waistcoats at 5 centimes each ($\frac{1}{2}$ d.).

Sometimes there are hours, and even whole days, when they remain unoccupied through lack of regular work.

Iseghem (Population 14,732) Western Flanders.

BOOTS AND SHOES.

The boot and shoe industry constitutes one of the principal resources of the work-people in this district. All the manufacturers here place their work outside for execution, with the exception of one who possesses a plant operating Singer machines by power.

The boot-uppers are cut at the factories, and the home workers receive them ready prepared for stitching. Half a dozen firms distribute sewing work to about 250 work-people.

All the workwomen have to finish off the uppers completely, and those who are unable to stitch the button-holes are obliged to seek assistance from other workers who possess a button-hole sewing machine (there are ten Singers' at Iseghem), each machine-sewn button-hole, without bar, costing them one centime ($\frac{1}{10}$ of a penny). The bars are afterwards stitched by hand.

A woman occupied in boot and shoe work earns on an average Frs. 12 per week (about 9s. 6d.), whether the uppers be of good or cheap quality; they exercise less care in the sewing of these latter, and although they are paid at a lower rate per pair, they are able to finish off more in a given time.

They have to collect and carry back their own work to the manufacturer.

At Iseghem the working class families dwell in cottages, paying a monthly rent of Frs. 14 to Frs. 15 (about 11s. to 12s.).

Here are three instances of the wages earned :—

1. Family composed of father, mother and daughter. The daughter, 22 years old, is seamstress. She works only at goods of superior quality, and earns from Frs. 12 to Frs. 15 (9s. 6d. to 11s. 10d.) per week. She stitches the button-holes by hand and sews on the buttons, so that the only expense is for cotton and silk thread, costing Frs. 2 to Frs. 2.50 per week (1s. 7d. to 2s.). She can do from three to four pairs of ladies' boot-uppers per day, which are paid at the rate of 80 centimes ($7\frac{1}{2}$ d.) per pair, or ten pairs of men's or ladies' boot-uppers with eyelets (lace-up boots). In the busy season they work from 6 o'clock in the morning till 9 in the evening, with an interval of two hours for meals. The father is a house-painter by trade, working on his own account, and the mother devotes her time to the household duties.
2. Family, consisting of father (widower) and three daughters. Two of the daughters are occupied on high-grade boot-uppers, and stitch eight or nine pairs per day, for which they are paid at the rate of 85 centimes per pair (8d.). The third daughter works the button-holes on a Singer 23- machine. She also stitches button-holes for other workers, for which she is paid one centime each ($\frac{1}{10}$ of a penny), thread found, but does not stitch the bars. It may be mentioned that these are very skilful workers.
3. Family: Father (widower) and two daughters. The two daughters in this case give their time to sewing boot-uppers of a poorer quality, for which they receive 65 centimes per pair ($6\frac{1}{2}$ d.). Through their combined efforts they can finish off six pairs per day, also stitching the button-holes by hand and sewing on the buttons. At other times they work on children's boot-uppers, paid for at the

rate of 20 to 30 centimes each (2d. to 3d.), according to the quality, and together they can complete 20 pairs per day. From their earnings must be deducted a daily expense of 35 centimes (3½d.) for thread.

Herzele (Population 2,843) Eastern Flanders.

CORSETS.

Herzele possesses an important industry, viz., the manufacture of corsets, from the cheapest to the highest grade. This industry is carried on both at the factory and at the homes of the operators, who are generally very skilful in the work.

In a convent at Herzele there are extensive workrooms belonging to a very important Brussels manufacturer, where 200 corset makers and 50 apprentices are employed, inserting the reed or bone and putting in the finishing stitches by hand. Each worker has a sewing machine—power benches not being in use in these workrooms, or in any of the other workrooms in Belgium belonging to the firm in question. All the sewing machines employed are of the “Singer” make, and of the Osc. Sh. class (15K5).

Although occupied throughout the day at the workshops, these operatives continue their labours at home in the evening, where they use a sewing machine of their own, and this work at home, added to what they do at the workshops, brings in a rather remunerative wage to the corset makers; the earnings varying according to the skill, capacity and zeal of the worker.

The corset makers who get married are not allowed to continue their occupation in the convent workrooms. They, however, receive work at home, but suffer from the dead season; for when business is slack the manufacturer ceases placing work outside, and only finds employment for those working in their workrooms.

The married workwomen occupied in their homes for the firm in question number 40 odd. Besides these there are 100 or so, married and unmarried, who work exclusively at home, making corsets for other firms; so that the total number of corset makers engaged in this industry at home may be calculated at about 140.

The earnings of the more skilful workers on medium and high-grade corsets vary between Frs. 13 and Frs. 20 (about 10s. 3d. to 15s. 9½d.) per week, from which must be deducted

Fr. 1 (9½d.) for thread, and Frs. 2 (1s. 7d.) for the apprentice, leaving a net weekly gain of Frs. 10 to Frs. 17 (7s. 10½d. to 13s. 5d.).

The other corset workers with less ability make the cheaper article only and earn from Frs. 11 to Frs. 15 (8s. 8½d. to 11s. 10½d.) per week, which is reduced to a net wage of Frs. 8 to Frs. 10 (about 6s. 4d. to 9s. 5d.) after the same expenses have been deducted.

The work has to be fetched and taken back to the manufacturer; the apprentice being entrusted with these errands.

The good season extends over eight months, during which time the home corset workers put in a 13-hour day, and even more, and earn a high wage. For the remaining four months of slack time the work is not regular, and only brings them in a small wage. With very few exceptions the sewing machines used by the corset workers are "Singers," of the types 15K3, 15K5 and 15K26.

In addition to the 200 sewing machines employed in the workrooms at the convent, there are about 300 others of the Company's make in operation at the homes of the corset makers.

We give hereafter two examples of wages earned:—

1. Family composed of father, mother and six children, the eldest being eleven years old, and the youngest four years. In winter time the father works at home, or on the farm, and spends the summer harvesting in France. The mother makes corsets at home, giving her attention also to the household work. She has earned:—

Nov. 7th, '05	Frs. 9.20	Feb. 5th, '06	Frs. 6.66
Nov. 14th	.. 9.00	Feb. 12th	.. 5.50
Dec. 11th	.. 18.37	Feb. 19th	.. 11.22
Dec. 18th	.. 10.43	March 5th	.. 17.43
Dec. 26th	.. 4.50	March 12th	.. 16.20
Jan. 16th, '06	.. 12.17		

The irregularity of this wage table arises from the fact that the person in question does not work constantly. These people pay an annual rent of Frs. 200 (about 158s.) for a small house with a little land attached. They do also a little rearing of stock and possess a calf, goat, and two pigs.

2. Another instance : A corset maker, very *capable and diligent*, working at home ; her husband follows the trade of cobbler in winter, and goes to France in summer for the harvest. The wife earned :—

Feb. 12th, '06	Frs. 9.02	March 5th	Frs. 23.49
(week she was married)			
Feb. 19th	Frs. 16.65	March 12th	„ 28.44
Feb. 26th	„ 24.09	March 19th	„ 24.89

From each of the above sums must be deducted
Frs. 3 for expenses, leaving a net average gain of
Frs. 21.10 per week (about 14s. 4d.).

At Herzele many of the working class are their own landlords.

Lede (Population 5,900), Eastern Flanders.

SHIRTS.

The shirt industry was introduced into Lede 30 years ago. Formerly the women and young girls followed the lace-making trade, which was not so lucrative as the manufacture of shirts.

Two important Brussels firms have each established a workshop there. There are 60 operatives in one, and the other finds employment for 50 odd. These workwomen also have sewing machines of their own at home, at which they work in the evenings on returning from the workshops.

In addition to those who are occupied during the day at the workshop and in the evening at home, there are about 250 others, among whom are many married women, working altogether at home for various Brussels manufacturers, each of whom possess a sewing machine (in some homes two or three machines are to be found).

At Lede they manufacture shirts of all kinds—men's, ladies' and children's, white and coloured, of fine and coarse linen, drill and zephyr, and in the cheap, medium and superior qualities.

At the age of 13 the young girls serve their apprenticeship to the experienced shirt makers, and after a few weeks' instruction they receive a small weekly wage of Frs. 3 to Frs. 4 (2s. 4d. to 3s. 2d.), and remain apprenticed until they become thoroughly acquainted with the trade.

The net earnings (with expenses deducted) of these home workers amount to from Frs. 11 to Frs. 13 per week (about 8s. 8d. to 10s. 3d.).

There is rarely any lack of work ; the Brussels manufacturers get as much done as possible at Lede on account of the relatively moderate wages paid.

We give hereafter scale of wages paid to the shirt makers :—

Second quality shirts, for youths, Frs. 3.36 per doz. (2 ¹ / ₈).					
First	„	„	„	4.08	„ (3 ²¹ / ₅).
Common	„	„	women	3.60	„ (2 10).
Medium	„	„	„	4.78	„ (3 9).
Superior	„	„	men	5.50	„ (4 ¹ / ₄).

The button-holes are stitched by machine in the manufacturer's stitching department.

We give hereunder the earnings of a married woman, mother of six children, of whom the eldest daughter, age 15 years, helps a little in the domestic work. The father works outside.

May 12th, '06	Frs. 11.53	July 14th, '06	Frs. 7.15
May 26th	„ 13.54	July 21st	„ 8.30
June 2nd	„ 6.82	July 28th	„ 10.66
June 9th	„ 9.94	Aug. 11th	„ 12.70
June 16th	„ 7.75	Aug. 25th	„ 15.37
June 30th	„ 8.56	Sept. 8th	„ 12.53
July 7th	„ 9.71	Sept. 22nd	„ 15.60

Encumbered with her household duties, this woman is unable to work regularly.

The father, a farm hand, earns Frs. 1 (9d. to 1s. 2d) per day. the younger sister devotes her time to the domestic work.

Earnings of a home worker, a young woman 26 years old, aided by an apprentice age 14 :—

Oct. 6th, '05	Frs. 19.55	Nov. 24th '05	Frs. 10.82
Oct. 13th	„ 10.55	Dec. 1st	„ 13.54
Oct. 20th	„ 15.35	Dec. 8th	„ 12.33
Oct. 27th	„ 12.14	Dec. 15th	„ 19.39
Nov. 3rd & 10th	„ 21.54	Dec. 22nd	„ 11.68
Nov. 17th,	„ 10.76		

The shirt maker in question has to pay out of the above wages an average of Frs. 6.90 per fortnight to the apprentice.

The shirt makers working for the two firms who have workshops at Lede have to fetch and carry back the work ; whilst those working for the other manufacturers established at Brussels receive and return the work through a person so commissioned, and who is entrusted with the reception and despatch by rail.

The annual rent of a cottage with a holding of land attached is from Frs. 100 to Frs. 120 (about 79s. to 95s.). Many of the working class are their own landlords.

Louvain (Population 42,100), Province of Brabant.**SHIRTS.**

At Louvain there are ten firms who give out work for execution in the homes, and the speciality here is the manufacture of cheap shirts.

The firms in question find home work for more than 400 seamstresses. A form is given with the work stipulating the quantity of shirts to be made, the number, the cut, and the price of the making-up. At the week-end they are paid on handing over their account.

The manufacturers themselves sell the thread to the work-women, which they pay for at the rate of 23 to 27 centimes ($2\frac{3}{10}$ to $2\frac{7}{10}$ of a penny) per reel, containing 1,000 yards.

They finish off the shirts completely, stitching the button-holes and sewing on the buttons by hand.

The general wage paid per shirt is 15 centimes ($1\frac{1}{2}$ d.), and 18 centimes ($1\frac{1}{3}$ of a penny) when the material is heavier.

Some of the shirt makers have an assistant apprentice, 13 to 15 years old, who is paid according to her capacity and the length of time she has served at the trade.

In other homes the mother helps her daughter or daughters, and so replaces an apprentice.

The apprentice is generally entrusted with the button-hole work and sewing-on of the buttons, and also collects the work from the manufacturer, and carries back the finished article; this is an obligatory condition.

They reckon on eight months of good season and four months bad.

The rents of the dwellings tenanted by the working families reach from Frs. 14 to Frs. 15 per month (about 11s. to 11s. 9d.). Each family generally lives independently.

Hereunder are three instances of wages earned :—

1. Family composed of father, mother and young child. The father is a working mechanic, earning 40 centimes (4d.) per hour. The mother works conjointly with an assistant apprentice, who receives a weekly wage of Frs. 1.20 (1s.). She is a skilful worker, finishing off eighteen shirts a day, and gives her attention at the same time to domestic duties. She makes shirts of fairly good quality, which are paid for at the rate of 18 to 22 centimes ($1\frac{4}{5}$ to $2\frac{1}{5}$ pence) each.

Taking an average of 20 centimes per shirt, this seamstress can earn a daily wage of Frs. 3.60 (2s. 10d.), or Frs. 21.60 per week from which must be de-

ducted for thread	„	0.70	„
For assistant apprentice	„	1.20	„
<hr/>			
1.90			

leaving a net weekly gain of Frs. 19.70 (16s.)

This wage is, of course, earned during the good season, which lasts from eight to nine months of the year. The monthly rent of the house is Frs. 16 (12s. 8d.), and it may be mentioned that these people enjoy a fair amount of home comfort.

2. Three sisters, ages respectively 25, 22 and 15 years, working conjointly and living together. They possess two machines. The elder sisters make cheap coloured shirts, for which they receive Frs. 1.40 to Frs. 1.60 (about 1s. 1d. to 1s. 3d.) the dozen. They can make two dozen per day. The youngest sister sews on the buttons and stitches the button-holes. Their combined earnings can be calculated as follows :—

Two dozen shirts per day at an average of Frs. 1.50 (1s. 2½d.) per dozen, totals up to Frs. 3 (2s. 4½d.), or Frs. 18.00 per week
Deduction for thread „ .92 „

Net gain	Frs. 17.08 (13/6½.)
----------------	---------------------

They pay a weekly rent of Frs. 2.50 (about 2s.), and have also to pay the same amount every week for the hire of the two sewing machines. These are then people of very limited means, although they procure regular work all the year round.

3. Family composed of father, mother and three children. The mother and one daughter, with two assistant apprentices, are occupied making shirts, and use three sewing machines. Between them they finish three dozen coloured shirts per day, for which they are paid 14, 16 and 18 centimes each (1¼, 1⅓ and 1⅔ pence). An output of three

dozen per day, paid for at an average rate of 16 centimes ($1\frac{3}{5}$ pence) per shirt gives a weekly gain of Frs. 34.56

Deducting for thread Frs. 1.38

2 assistants' wages ,, 7.20 ,, 8.58

there remains a net gain of Frs. 25.98 (20/9)

This family pay also Frs. 2.50 per week (2s.) for the hire of one of their sewing machines. The father is a coachman, and earns Frs. 2.50 to Frs. 3 per day (2s. to 2s. 4d.).

Oupeye (Population 1,500), Province of Liege.

CHEAP SHIRTS, OVERALLS, BLOUSES, SKIRTS, APRONS, ETC.

In this place there are about 300 home workers engaged in making coloured shirts, overalls; also blouses, skirts, under-clothing, and aprons for women—all of inferior quality.

The work is found by twenty, or so, Liege houses, trading in clothing for the working class.

The work has usually to be fetched and taken back to the employers; but in some cases the work is distributed through the medium of another person, who also collects and returns the finished article.

At Oupeye the male portion of the population are either miners or gunsmiths employed at the Herstal Arm Factory.

Monday is devoted to the cutting of the shirts, skirts, overalls, etc., also to other kinds of work, errands, etc.; so that stitching operations do not commence until Tuesday, and, consequently, are only carried on five days of the week. The working day averages fifteen hours. They have about ten months of busy and two months of slack season during the year.

In addition to the 300 home operatives domiciled at Oupeye, there are also about 100 living in the neighbourhood, so that the total for Oupeye and district can be estimated at about 400.

These workers have also apprentices, who stitch the button-holes by hand and sew on the buttons. They are not paid any wages at the commencement of their apprenticeship, but receive later a small wage of Frs. 1.50 to Frs. 1.80 (1s. 2d. to 1s. 5d.) per week.

Each workwoman must find her own thread and the buttons.

The wage rate is fixed as follows:—

Men's coloured shirts, 18, 20 and 25 centimes ($1\frac{1}{2}$ d., 2d. and $2\frac{1}{2}$ d.).

Boys' coloured shirts, 10, 12 and 15 centimes (1d., 1½d. and 1½d.).

Linen overpants, 22 to 25 centimes (2½d. to 2½d.).

Petticoats with single flounce, 18 centimes (1½d.).

Petticoats with double flounce, 25 centimes (2½d.).

Women's pants, 18 centimes (1½d.).

Women's aprons, 5 centimes (½d.).

Women's blouses, 16 centimes (1½d.).

Here are two examples of wages earned :—

1. Woman working alone making shirts with tucks, paid for at the rate of 25 centimes each (2½d.). She puts in five working days per week, finishing nine shirts a day, and so earns Frs. 11.25
Deducting for expenses 2.25

Leaves a net weekly gain .. 9.00 (7s. 7d.)

2. Another woman working with an apprentice makes twelve shirts with tucks per day at 25 centimes each (2½d.).

She earns then Frs. 15.00

Deducting for acces-

sories .. Frs. 2.25

Apprentice's wages, 1.50

.. 3.75

There remains a weekly gain

of Frs. 11.25 (9s. 6d.)

The house rents are relatively cheap at Oupeye. The rent of a cottage of four rooms, with yard or kitchen-garden attached, is from Frs. 10 to Frs. 15 (about 8s. to 12s.) per month. Many of the working people are their own landlords.

Renaix (Population 20,865), Eastern Flanders.

SHIRTS.

The manufacture of shirts has greatly developed at Renaix. They make principally the cotton and flannel article of common quality, although the better shirt is also made.

The number of shirt makers occupied at home is estimated at 570; they work for about 25 manufacturers in the town.

Shirts made at Renaix are sold to the shopkeepers in the towns, and to the dealers who sell at the markets.

The rate of pay runs from 9 to 25 centimes (⅑ to 2½d.) per shirt. They finish off the shirt with the exception of the button-holes, which are machine-stitched on the premises of

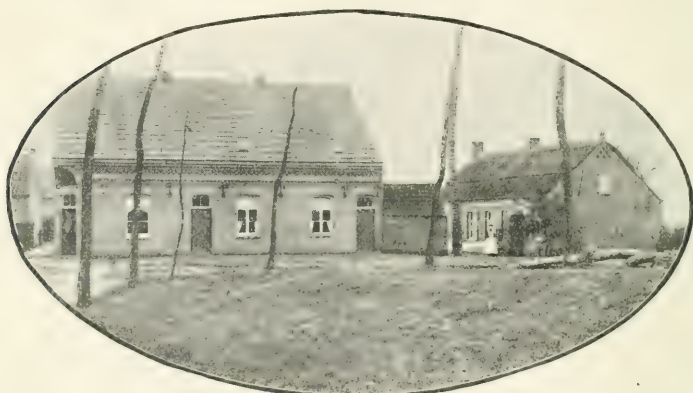
the manufacturer by the aid of Singer Button-hole Machines.

The shirtmakers have to pay for their own thread, and the manufacturer finds the buttons.

The shirtmakers are sometimes helped by apprentices, who receive no wages during the first six months. Their number, however, is rather limited, in view of the fact that the young girls generally learn the trade while working with their mother or sisters.

The work has to be fetched and taken back to the manufacturer.

At Renaix the working families live in cottages, with monthly rents varying from Frs. 10 to Frs. 25 (about 8s.



MODERN ARTIZANS' DWELLINGS, BELGIUM.

to 19s. 9d.). For Frs. 15 (about 12s.) per month a cottage composed of four rooms with garden attached can be had.

Here are two instances of wages earned :—

1. Family consisting of father, mother and five children. The father is a mason by trade, earning 30 centimes (3d.) per hour; one of the sons works on the State railways, for which he is paid Frs. 2.70 (2s. 1d.) a day; a daughter, age 23, makes shirts; and the mother divides her time in doing the household work and helping her daughter by sewing the buttons on the shirts. The remaining three children still go to school :—

Aug. 4th, '06	Frs. 16.83	Oct. 6th, '06	Frs. 12.90
Aug. 11th	„ 14.84	Oct. 13th	„ 17.38
Aug. 18th	„ 17.66	Oct. 20th	„ 17.76
Aug. 25th	„ 11.58	Oct. 27th	„ 19.14

Sept. 2nd, '06, Frs	13.15	Nov. 3rd, '06, Frs.	13.94
Sept. 9th	„ 10.14	Nov. 10th	„ 14.16
Sept. 16th	„ 12.32	Nov. 17th	„ 27.93
Sept. 23rd	„ 13.00	Nov. 24th	„ 23.18
Sept. 30th	„ 11.84		

From these wages must be deducted a weekly sum of Frs. 1.50 for sewing accessories (thread), leaving an average weekly gain of Frs. 14.25 (11s. 3d.). This family live in a cottage with a monthly rent of Frs. 13 (10s. 3d.).

2. Family composed of father, mother and five children. The father is an agriculturist, two of the sons working with him, and another works in a factory, earning Frs. 12 (9s. 6d.) per week. A daughter, 21 years old, is engaged in shirt making, and is helped by her younger sister, as well as an apprentice ; whilst the mother gives her attention to the domestic work.

Particulars of earnings (paid fortnightly) :—

May 11th, '06 Frs.	26.05	Sept. 20th, '06 Frs.	29.14
June 1st	„ 30.79	Oct. 14th	„ 40.74
June 17th	„ 14.37	Oct. 26th	„ 28.33
July 7th	„ 26.81	Nov. 15th	„ 25.54
July 24th	„ 24.91	Dec. 1st	„ 33.40
Aug. 14th	„ 24.88	Dec. 21st	„ 34.99
Sept. 6th	„ 37.10		

To cover the cost of thread a fortnightly deduction of about Frs. 3 (2s. 4d.) must be made on the above wages ; then the average net gain per fortnight is Frs. 29 (about 23s.).

GERMANY.

Aschaffenburg (18,091 inhabitants), and surrounding Districts.

	Inhabitants		Inhabitants
Grossostheim	.. 2,728	Roszbach	.. 562
Momlingen	.. 1,566	Kleinwallstatt	.. 1,440
Leidersbach	.. 682	Wenigumstadt	.. 865
Grosswallstatt	.. 1,047	Sulzbach a M	.. 936
Pflaumheim	.. 1,083	Volkersbrunn	.. 272
Eisenbach	.. 809		

The manufacture of ready-made clothing is a large "home" industry in this district, affording employment to hundreds of families.

The majority of the tailors have one or two, and at times even three, journeymen working sewing machines, while a number of them are also assisted by wife and children, who frequently do hand-work only—sewing on buttons, etc. The work, which is cut in the factories, is called for by the workers, and, when finished, is brought back to the factory, where the amount earned is at once paid. There are also seamstresses in the district, who mainly sew trousers; but to



HUSBAND AND WIFE MAKING SHIRTS.

Daily work, 12 hours; Earnings, 30/- per week.

accomplish said work it is necessary for them to have served an apprenticeship of several weeks with a tailor. These sewers can earn about M2 a day; the tailors correspondingly more, viz. :—about M3 to M4.

There are a number of tailors in the above places who have a button-hole sewing machine, and make also button-holes for other tailors. For each button-hole 2 pfennigs are paid by the tailor ordering them, not by the manufacturer.

The tailors living in these districts work for Aschaffenburg factories, which have a large export trade of ready-made clothing.

**Griesheim (8,546 inhabitants), and Schwanheim
(3,738 inhabitants).**

In the above places the white goods industry flourishes, mainly body and bed linen being made, which is delivered on a certain week-day to the employers, mostly Frankfurt wholesale firms, who also supply the material to be used for the linen articles. It is not possible to state the individual prices paid, as these differ greatly according to the work being ordered with, or without button-holes, etc. Frequently the house workers are employers, who in turn give employment to a number of women or girls, so that not every individual worker settles directly with the manufacturer, but with a middleman. Women engaged in such work earn, according to skill, up to M15 weekly wages, working from 8 till 12 and from 1 till 7 o'clock.

**Offenbach a/M (50,929 inhabitants) and surrounding
places.**

	Inhabitants		Inhabitants
Bergen ..	.. 4,393	Heusenstamm ..	.. 1,911
Dietzenbach ..	.. 2,031	Muhlheim ..	.. 4,374
Fechenheim ..	.. 6,408	Rumpenheim ..	.. 1,038
Hausen ..	.. 1,500	Burgel ..	.. 4,703
Lammerspiel ..	.. 600	Enkheim ..	.. 1,088
Rembruchen ..	.. 251	Hainhausen ..	.. 499
Zellhausen ..	.. 1,038	Jugesheim ..	.. 1,704
Bieber ..	.. 2,733	Obertshausen ..	.. 1,295
Dudenhofen ..	.. 1,426	Weisskirchen ..	.. 694
Froschhausen ..	.. 920		

In all the above places the stitching of portfolio goods is carried on as a home industry; the people making principally purses, satchels, pocket-books, cigar and cigarette cases, etc.

The articles to be made are cut and otherwise prepared for the home workers by the manufacturers of Offenbach, to whom the finished work is returned. In this way not only individual women or girls, but whole families, are engaged in the manufacture of portfolio goods; the husband being portfolio maker by trade, whilst the wife does the sewing work. These families earn on an average M40 to M50 per week, and individual women or girls M20 to M22.

**Pirmasens (30,195 inhabitants), and Rodalben
(3,151 inhabitants).**

Clausen ..	908	Zeselberg ..	409
Herschberg ..	669	Burgalben ..	567
Riedelberg ..	441	Thaleischweiler-	
Wieersimten ..	566	Thalfröschen ..	2,008
Waldfishbach ..	1,387	Windsberg ..	599
Donsieders ..	604	Lemberg ..	1,796
Gersbach ..	538	Weselberg ..	432
Gross-Klein-Stein-		Hoheinod ..	901
hausen ..	1,079	Rottenbach ..	620
Ruppertsweiler ..	387	Kröppen ..	566
Niedersimten ..	1,186		

In the above places the manufacture of shoes and boots is carried on as a house industry, hand-in-hand with the machine shoe industry at Pirmasens. Not only do a great many of the workers employed in the factory, more particularly the stitchers, work after the closing of the factory till late in the night on their sewing machines, in order to finish the work taken home with them, but even part operations are exclusively, or at least to a large extent, carried out as home work. The finishing work in connection with boots and shoes is partly done by home workers, also frequently the stitching, binding with tape, and fastening of rosettes and ornamentation; more particularly, however, the sewing of the soles to the uppers of felt, and cloth shoes, as well as baby shoes. This latter kind of work forms also the principal home industry in the country.

The work is carried on as follows:—

One member of the family fetches the material from the manufacturers, generally in a semi-manufactured state, *i.e.*, finished uppers and soles. These are tied together in dozens and labelled with name of factory, name of home worker, and description of goods, and the husband and wife are engaged from morning till night in the finishing of these goods. Other members of the family who have no other profession, and are not employed at the better paying work at the factory, frequently assist in the home industry, and even the children still at school are requisitioned for the work in their spare time.

Apart from the stitching of the boot uppers on a Singer class 31-18 machine, the work is carried out by hand. The wife usually stitches boot-upper and sole together, while the husband is engaged in the more fatiguing finishing work. The material—shoemakers' paste, pegs,

tacks, thread, wax and ink—must be supplied by the home worker himself, who besides has to pay to the factory a certain rent for the use of the lasts provided by the latter. The amount of work which the home worker is able to turn out varies greatly according to his skill and the number of persons assisting him, but still more according to the kind of goods made.

The earnings of a family fluctuate between M25 and M40.

Bartoloma O/A, Gmund (1,182 inhabitants).

In these places several hundreds of girls and women are engaged in stitching corsets. They work for factories in other places, which send the unfinished goods, with all the necessary material, to one family, who in turn distributes it amongst the different workers. Each worker has a small book, in which the number of corsets distributed for being stitched and thereafter to be returned, is entered. The wages for piecework vary greatly according to the quality of the corsets being fine or inferior. The girls earn M1.20 to M1.80 daily, the best workers, perhaps, M2.

In the suburbs of Stuttgart : Ostheim, 4,627 inhabitants ; Heslach, 14,524 inhabitants ; Unterturkheim, 6,758 ; Wangen, 4,157. Further, in the places on the "Filder," in the vicinity of Stuttgart : Vaihingen, 4,695 ; Mohringen, 3,494 ; Pleiningen, 2,183 ; Leinfelden, 398 ; Bernhausen, 1,926 ; Musberg, 819, and Echartdingen, 1,955. And finally, in Schonaich, 2,025 ; Boblingen, 5,738 ; Feuerbach, 11,522 ; Zuffenhausen, 7,631 ; Besigheim, 3,192, and Beitingheim, 5,066, the manufacture of tricot goods forms a home industry. The workers principally make tricot shirts, trousers and jackets, which, cut and roughly sewn, are supplied by a great number of tricot goods factories. The work of the home workers consists only in trimming, *i.e.*, in sewing on wristbands, collars and fronts. Button-holes and buttons are made and sewn on respectively in the factory itself.

The people in the suburbs of Stuttgart call for the work at the factory, and also take it back themselves. In the more distant places, *i.e.*, Leinfelden, Zuffenhausen and Schonaich, however, the factories have depôts, which are usually under the superintendence of an experienced tricot stitcher, who receives the goods by cart from the factory, and also sends them back in the same way. A woman, for instance, who is the manageress of the depot of a large Stuttgart firm at Leinfelden, employs about 80 to 100 female home workers.

The workers in the several districts call at these depôts for work, finish it at home, and thereupon return it to the depôt, where they are paid by the manageress.

As regards the earnings of these people. We would say that when working about 9 hours daily, during which time the workers also attend to their small households, they earn about M1.50 to M2 a day: some of them who can work the whole day without interruption being able to earn about M2.50. Of course, the pay depends upon the quality and kind of goods as well as upon the care to be bestowed upon the work. Experienced female workers are principally provided with better class work, and consequently earn better wages.

A woman at Heslach, 53 years of age, has sewn tricot work for 23 years for an important Stuttgart firm, thereby earning a living. She is now looking forward with pleasure to her 25th anniversary as a homemaker for the above firm.

Schw. Gmund (20,476 inhabitants) and the following surrounding places:—

Heubach	.. 1,444	Oberbobingen	.. 401
Moggingen	.. 1,033	Hussenhofen	.. 344
Lautern ..	.. 514	Underbettringen	.. 392
Lauterburg	.. 436	Oberbettringen	.. 780
Bartholoma	.. 961	Bargau ..	.. 732
Sulzbach	.. 566	Waldstetten	.. 1,359
Bohmenkirch	.. 1,479	Rechberg ..	.. 489
Essingen ..	.. 1,438	Alldorf ..	.. 1,411
Unterbobingen	.. 613	Waschenbeuren	.. 1,330

In the aforementioned places the manufacture of corsets is carried on to a very large extent as home industry. There are, of course, still a great number of smaller places where this industry is also to be found, but on a smaller scale. We shall, therefore, omit mention of same. The female workers principally make corsets for the factories at Heubach and Moggingen. The workers at these places call for the work, and when finished take it back to the factory. In the places which are a greater distance away—Gmund, Waschenbeuren, Alldorf, Bohmenkirch, etc., the factory has depôts under the superintendence of a manageress, who distributes the work, and, when finished, takes it back for inspection and delivery to the factory.

The corsets are supplied cut to the female workers, who then stitch them together. A number of workers cover the corsets with flossing and fanning stitches and sew on lace. If there are children in the respective households they insert

steel, reeds, etc. As the people in these districts have no other opportunity of earning a living, the wages are on the whole not very high. The earning of an experienced female corset worker amounts on an average to about M1.20 daily, but in most cases is somewhat more, and many even earn up to M1.50. Fanning or flossing and sewing on lace is usually done by older women, who at the same time look after their households. They earn daily 60 pfennigs, and with the assistance of the children who insert steel, reed, etc., M1.

The dépôt manageress pays the workers every fortnight, and receives for her work 1 pfennig for each corset. If this manageress employs many women, as, for instance, the one at Gmund, who has 80 workers, about 4,000 to 5,000 corsets can be handed over to her weekly, so that she earns a very good salary. The beginners are mostly taught by the manageress herself, and have to pay M5. to M10 premium for an apprenticeship.

Bockingén	.. 6,607	Kirchheim a/N	.. 1,603
Weinsberg	.. 3,093	Oehringen ..	.. 3,588
Neckarsulm	.. 4,313	Lauffen a/N	.. 1,175

In these places, which are all situated in the vicinity of Heilbronn (37,889 inhabitants), the manufacture of cloth shoes is carried on as house industry. The making of the soles is generally done by men, while the women close the shoes.

The workers are bound to purchase the material from the manufacturers, to whom they also deliver the finished goods. The outlay for a dozen pairs of shoes amounts to M6 to M8 according to quality. The material is cut to patterns; the shoes are thereupon closed, bound, and provided with soles. For the finished shoes M8 to M10 per dozen pairs are paid to the workers, and as an experienced worker, with the assistance of his wife, is able to finish daily two dozen pairs of shoes, his clear profit, after deducting the money paid for the material, will amount to about M4 daily. The people engaged in this kind of home work have usually a small garden or a piece of ground which they cultivate at the same time; the wife attending also to the household.

Ulm (52,000 inhabitants) and surrounding places.

Langenau	.. 3,538	Oellingen	.. .. 364
Lonsee ..	.. 409	Setzingen	.. .. 389
Niederstotzingen	.. 1,096	Asselfingen	.. .. 695
Rammingen	.. 615		

In these places about 1,000 girls and women work for the felt toy factory of Merg. Steiff, at Giengen. A number of the married women who distribute the unfinished goods receive whole cartloads of work; those in Ulm being connected by telephone with the factory, and who distribute goods to be cut and sewn. For cutting animal bodies 24 pfennigs per dozen are paid, and experienced cutters earn up to M2.40 daily, cutting 10 dozen. For stitching animal bodies M1.54 per dozen is paid, and the maximum of work turned out daily by a stitcher is $1\frac{1}{2}$ dozen. In this work—cutting as well as stitching—also children, even those of 6 to 8 years, assist, and earn for their part 40 to 60 pfennigs daily. There are families who earn by such work M40 to M50 weekly.

Hechingen	..	3,966	Schlatt	..	..	530
Bisingen	..	1,265	Starzeln	..	..	325
Boll	..	693	Stein	..	..	413
Burladingen	..	1,751	Steinhofen	..	..	540
Grosselfingen	..	1,140	Stetten	..	..	677
Hausen	..	865	Weilheim	..	..	641
Jungingen	..	840	Wessingen	..	..	458
Killer	..	386	Zimmern	..	..	494
Raugendingen	..	1,324				

In the aforesaid places the stitching of tricot goods and shoes is carried on to a large extent as home industry. A great number of tricot goods and shoe factories of this district have a large amount of their sewing done outside the factory. This refers to the closing and trimming of tricot shirts, as well as to the sewing and binding of house shoes and the stitching of vamps. According to their skill the female house workers earn 20 to 30 pfennigs an hour.

Ebingen	..	10,000	Thailfingen	..	4,598
Truchtelingen	..	1,153	Onstmettingen	..	2,417

In Ebingen and the other places the stitching of tricot goods is principally carried on as home industry. A number of persons are also engaged in repairing defects in the material, while others again stitch corsets, etc. In the tricot goods factories the men are mostly employed as weavers, earning about M20 to M24 weekly, working from $6\frac{1}{2}$ a.m. to 6 p.m. Women and girls, however, who do not go to the factory occupy themselves, besides their housework, with stitching tricot shirts, trousers, jackets and similar articles, and according to the work turned out can earn M10 to M15 weekly. School children and older women, by sewing on buttons, cutting threads, etc., can earn 50 pfgs. and about M1 a day respectively. The work is fetched from and

returned to the factory, where the respective goods have previously been cut and prepared. In distant places there are dépôts where the work is similarly treated.

Reutlingen (23,486 inhabitants), and Urach (4,897).

The tricot goods, network and clothes factories at Reutlingen employ a great number of female home workers in the sewing of tricot shirts, network jackets and workmen's suits (blue blouses). An important clothes factory at Urach also turns out blue workmen's suits made in large quantities by female home workers of this place. The material is cut and, with sewing thread, sent to the workers, who have to return the finished work on a certain day. The earnings for the above wholly depend upon the skill of the seamstresses. The average wages when working 10 hours are about M2.50.

Tuttlingen (13,471 inhabitants).

In this place the stitching of boot uppers is carried on as home industry. The workers, mostly women, work for several factories in this place, who send them the cut material to be stitched. These women earn M1.20 for a dozen pairs of finished leather uppers of children's boots, of women's boots M1.80, and of men's boots M2

Thailfingen (3,748 inhabitants).

In this place the stitching of tricot goods is carried on to a large extent as a home industry. The tricot goods stitchers (female) also work for the factories in the above place, and earn for the stitching of a dozen pairs of pants M-.50 to -.75, and a dozen shirts, M-.80 to M1.30.

ZITTAU.—The weekly or daily earnings of home workers vary greatly according to the skill of the worker and the material to be sewn. For the following statement of the daily earnings in the various branches we have taken a ten hours' working day, and the amount of work turned out by an experienced worker as a basis. The daily earnings are :—

M 1.50 to M 1.70	for workmen's wear.
M 2.— „ M 2.30	„ hemming table linen.
M 1.80 „ M 1.90	„ „ towels.
M 1.50 „ M 1.60	„ sewing aprons.
M 1.30 „ M 1.50	„ hemming handkerchiefs.
M 1.80 „ M 2.—	„ hemstitch and open-work.
M 1.90 „ M 2.20	„ sewing bathing gowns.

To improve these poor earnings the daily working hours are extended by working overtime.

ERFURT.—The average daily earnings of the different house workers are as follows :—

M 2.—	for stitching	gent's and ladies' clothing.
M 2.50	„ „	shoes.
M 2.—	„ „	gloves.
M 1.50	„ „	shirts.

BRESLAU.—The principal home industry carried on here is the manufacture of overcoats, jackets, trousers, waistcoats, dresses, morning coats and mantles, and also, but to some extent, the sewing of aprons, blouses, shirts and stitching of gaiters. Ready-made clothing is made for Breslau wholesale firms by a number of intermediaries, who distribute the work among the different home workers. The earnings of such are :—

For jackets	..	M-.80 to M2.—	each
„ morning coats	..	M-.90 „ M3.—	„
„ waistcoats	..	M-.30 „ M-.60	„
„ trousers	..	M-.50 „ M1.50	„

according to the quality of the material.

The firms in this city employ a great number of home workers in the sewing of shirts, and pay, according to quality, M-.80 to M1.50 per dozen.

Umbrella covers are also made by home workers, and a great number of women and girls are employed at this kind of work, the wages amounting to M-.10 for each cover.

Apron stitchers earn M1.80 per dozen

An important branch of the home industry is the stitching of gaiters for the boot and shoe factories of this city. M-.40 to M-.80 are paid for a pair of gaiters, and an experienced stitcher earns M10.— to M15.— weekly.

In Freiburg (Silesia and surrounding districts the “Gesellschaft für schlesische Leinenindustrie” employ a great number of female home workers with the sewing of palliasses and hemming of handkerchiefs. For both kinds of work pretty much the same wages can be earned by an industrious worker, viz. :—M1.50 to M1.80 daily.

In the mountain places of the county of Glatz mostly curtains and towels are hemmed.

In Schonfeld, near Mittelwalde, linen goods for infirmaries are sewn; and in Reinerz, bed linen for the Railway Administration and Post Office. For all this kind of work the home workers earn on an average M1.— to M1.30 per day.

In G^{or}litz there are four large handkerchief factories, who give out work to a large number of sewers. For cotton handkerchiefs, three sides of which have to be hemmed, the workers earn 5 and 6-8 pfennigs per dozen, according to the size of the handkerchief and the length of the stitch. For hemming linen handkerchiefs 9 to 13 pfennigs per dozen are paid. The weekly wages are M5.- to M10.-. For ornamental open-work hems stitched upon the No. 33-23 machine, the stitchers receive 18 pfennigs per dozen; for double hemstitch work, 36-43 pfennigs per dozen; the weekly wages being M6.- to M10.-. An apron factory and more important firms give out aprons to home workers for the sewing of which, according to the style of finish, M-.35 to M2.50 per dozen are paid.

LAUBAN, a town of 14,600 inhabitants, is the most important place in Germany as regards the manufacture of handkerchiefs. About thirty factories provide the home and foreign markets with their goods, and employ hundreds of home workers. The wages paid for children's cotton handkerchiefs, having three and four sides hemmed, are 4 to 5 pfennigs per dozen; for large handkerchiefs, three sides of which are provided with a hem, 6 to 8 pfennigs per dozen; and for linen handkerchiefs, 9 to 13 pfennigs per dozen; the weekly wages being M5.- to M12.-. There are moreover about 40 No. 33-23 machines used in the district, on which hem and spoke stitch-work for ornamental purposes are executed on handkerchiefs; the stitchers earning for this kind of work 18 pfennigs per dozen.

In GREIFFENBERG, a town of 3,400 inhabitants, there are three important apron factories which have large workrooms of their own, using mechanical power. These factories employ also a large number of home workers, not only in Greiffenberg, but also in the surrounding villages, as Schosdorf, Friedersdorf and Langenols. The wages paid for this kind of article vary greatly, as aprons of the most varied styles are made. For blue print aprons, M-.35 to M2.50 per dozen are paid; for white and coloured aprons, M-.50 to M4.50 per dozen. One factory also makes cotton petticoats, for which the wages amount from M1.- to M2.50 per dozen.

In SCHOOSDORF, near Greiffenberg, there is a factory for military equipment, which gives out tricot shirts for being trimmed, the wages amounting to M1.15 per dozen.

In LOWENBERG (5,600 inhabitants) there is a branch giving out aprons and cotton petticoats. For aprons M-.45 to M2.80 per dozen, and for petticoats M2.40 to M4.- per dozen are paid.

In Hirschberg, Schmiedeberg, Schonau a K., Liebau and Landeshut principally aprons are sewn for a number of firms, the daily wages amounting to M-.60 and M-.80 to M1.-.

In LANDESHUT the sewing of linen goods of every description, such as shirts, table and bed-linen, handkerchiefs, towels, etc., is carried on, the wages being about the same as for apron work.

A firm employs also a number of women in the sewing of blouses, and pays for plain sewing and tucked fronts M-.80 each, for trimmed blouses of better quality M1.20.

In SCHMIEDEBERG carpet sewing has recently been introduced as a home industry; an industrious stitcher is said to earn in about 13 to 14 hours a little over M2.

The town of LIEGNITZ is the principal place for the manufacture of woollen goods, and the four important factories in this line at said place have their goods, viz.—crocheted and knitted covers, children's bonnets, jackets, caps, mantles, etc.—almost exclusively made by home workers, who earn on an average M6.- to M8.- weekly.

Dolls' dresses and bodies, as well as stuffed animals, are also sewn for a Liegnitz wholesale toy firm; the weekly earnings ranging from about M5.- to M7.- on an average.

HAYNAU, the same as ZIEGENHALS i/S., is an important place for glove work, and a stitcher earns M1.10 to M1.30 per dozen, *i.e.*, M7.- to M8.- weekly on an average. The work is supplied by agents who receive the cut gloves from Berlin and South German firms.

Finally, GOLDBERG i/SILESIA must be mentioned as a place in which there is a factory for common kitchen blue print aprons, employing several hundreds of home workers, who earn M6.- to M8.- weekly; and in BUNZLAU and NAUMBERG a B. many women and girls sew linen goods, such as day shirts, shirt fronts, collars, cuffs, etc., earning about M6.- to M8.- weekly.

Kingdom of Saxony, Thuringia (Dresden District), Erfurt.

In the following places in Erfurt territory there are various branches of manufacture, and in connection therewith home industry, employing sewing machines, are to be found. The places in question are, Erfurt, Arnstadt, Ilmenau, Altenfeld, Groszbreitenbach, Gehren, and Lange-wiesen; shoes, ladies' wear, fustian shirts, fancy articles,

children's dresses, baby bonnets, children's mantles, kid gloves, braces, and dolls being the articles manufactured here.

In Erfurt and Arnstadt, where principally shoes and boots are made, this industry is wholly localised, *i.e.*, the shoes and boots are altogether made in the factories of the different firms, and only when the latter are overloaded with work, a very small percentage of upper stitching—for which the Singer 16-28, 16K26, 16-37 and 18-3 machines are used—is done by home workers.

The boot uppers, ready for being stitched, are delivered direct to the women by the manufacturers, to whom the finished work is thereupon returned. Owing to the variety of the work to be done, and the sizes of the boot uppers, there are no fixed wages for boot-leg stitching.

The finished goods of this branch of industry are mostly sold to home dealers, but a quantity are exported.

The manufacture of ladies' cloaks at Erfurt is second in importance among the manufacturing industries using sewing machines, and is almost exclusively carried on by home workers. The manufacturers give the cut mantles to intermediaries, who distribute the work among home workers, and, after receiving it back finished, return it to the manufacturers. Embroidery and appliqué work are done by special workers.

The intermediaries and house workers use the Singer 16-35, 16K36, 31-15, 15-31, 15-41, 23-19, 32 K.S.V. 1 and 37-2 machine; while for embroidery work 16K111 machines, and for ruches 24-19 machines are employed. Both intermediaries and house workers do job work, the wages being fixed in every individual case.

This article is purchased by country dealers.

The manufacture of fustian shirts is localised, and only a small number of home workers are engaged in this kind of work. The material is cut and distributed by the manufacturer among the home workers, M2 being paid for one dozen of finished shirts, without button-holes and buttons. These are sold by travellers and exclusively used in the country.

The manufacture of fancy articles—children's dresses and cloaks, etc., baby bonnets, etc., at Erfurt, is localised; home workers being only occupied in this connection with embroidery work over insertions for baby collars and bonnets. The

work is given out by the manufacturers, and, when finished, returned to the latter.

These articles are sold in the country.

There are no home workers employed in the manufacture of braces at Erfurt and Arnstadt.

The glove factories at Arnstadt and Ilmenau employ female home workers at Arnstadt, Ilmenau, Altenfeld, Groszbreitenbach, Gehren, and Langewiesen.

In Arnstadt and Ilmenau, the seat of the factories, the cut gloves are given directly to the house workers, and, when finished, returned by them to the factory. In the country places—Altenfeld, Groszbreitenbach, Gehren, and Langewiesen—however, the factories have expert manageresses, who supply the unfinished goods and take back the finished work. The women are paid M2.80 for a dozen pairs of gloves sewn upon the 46K1 machine, and M1.40 to M2 for a dozen pairs sewn upon the 46K.S.V.15 machine.

The sewing material is supplied by the manufacturer, but deducted from the wages. The ornamental seams on glove-backs are extra, and stitched by special workers—partly on the Singer 37-8 machines—in the factories themselves. The finished goods are partly sold in the country, and large quantities, as far as we are aware, are sent to America.

LEIPZIG.—In this territory, with the exception of the manufacture, on a small scale, of ready-made clothing and linen goods, the sewing of furs is the only home industry. In Leipzig itself, the most important business place for furs, the manufacture of fur lining and covers is carried on at home to a large extent, the large firms having the furs prepared and cut, and thereafter distributed among the workers for finishing.

The wages for a fur lining as that, for instance, required for a gentleman's fur coat are M1.25 to M1.75, depending mostly upon the kind of fur to be sewn. It is not out of the question, however, that one firm may pay somewhat higher for the same kind of fur than another. For sewing linings of hamster skins only 60 to 80 pfennigs are usually paid.

Besides Leipzig, fur sewing is done at Markraustädt i/Sax. In this place there are important factories for preparing and dyeing raw skins, and therefore the sewing of furs is carried on to a large extent as home industry. The weekly earnings

of a stitcher if engaged full time amount from M18 to M20 weekly, and some times more, the work being intermittent.

APOLDA.—In the Apolda district home industry is principally carried on in Apolda, Badsulza, and Dornburg o/Saale, where woollen goods are sewn. Generally the fabrics produced on knitting machines and looms are cut; blouses, sweaters, ladies' and gent's waistcoats and gloves being then made up therefrom. During the last few years the manufacture of children's clothing—mantles, jackets, bonnets, caps, dresses, has greatly increased. These articles are exclusively made in the above places. The wages earned in the manufacture of children's clothes are, generally speaking, more remunerative, an ordinary worker earning for this kind of work from M10 to M16 on an average per week. For machine-sewn knitted goods the average weekly pay is about M8 to M13. By ornamenting children's articles on an embroidery sewing machine an additional means of earning a livelihood at home has been set up, both here and in Stadtsulza, industrious and expert stitchers being able to earn up to M15 weekly wages.

ZITTAU.—Home industry, particularly in the Southern Upper Lusatia, is many-sided, and by far the greater part is carried out on Singer sewing machines. The work consists in the manufacture of working suits, hemming of napery and towels, sewing of bathing gowns, rough bath gloves and shoes and aprons, hemming of handkerchiefs, hemstitching and open work.

The manufacture of the aforesaid goods is carried on in the following places :—

1. Manufacture of working suits in Seifhennersdorf, Eibau, Neueibau, and Leutersdorf. The wages paid are :—For sewing men's jackets of light materials, 40 to 42 pfennigs each; thick rough cloth coats, M1 to M1.10 each; men's trousers, according to material, 9 to 16 pfennigs; same of sateen, 25 pfennigs; the wages paid for boys' clothes being correspondingly lower. For seaside and travelling suits somewhat more is paid, as the work requires more careful finish. The necessary sewing thread must be procured and paid for by the home workers themselves. The finished goods are supplied to the clothes factories of the respective places, who export or sell them on the German market.

2. Hemming of napery and towels at Waltersdorf, Gr. Schönau, Ober and Niederoderwitz. The wages paid for hemming towels are 6 pfennigs per dozen ; for hemming table napkins of 30 square centimetres, 11 to 12 pfennigs per dozen ; and for hemming napery, one pfennig per metre. Thread must be purchased by the sewers themselves. The goods are hemmed for the linen weaving mills of the respective places.

3. Sewing of bathing gowns, gloves, etc., of rough material. For sewing a cut bathing gown with hood for grown-up persons, M1.60 to M1.70 are paid, while the wages for rough bath gloves and shoes amount to 18 pfennigs per dozen. These articles are made in Gr. Schönau and a small quantity in Eibau. Also for this kind of work, which is supplied to the linen weaving mills of the Upper Lusatia, the women have to purchase the thread themselves.

4. Sewing of aprons is principally carried on as a home industry at Eibau and Seifhennersdorf, the workers being provided with the cut aprons by the wholesale firms, the wages paid fluctuate between M1.10 and M4 per dozen, according to the size, and whether with or without bib, etc.

5. Hemming of cotton handkerchiefs is done in Niedercunnersdorf, the wages, not including thread, amounting to 7 pfennigs per dozen of children's handkerchiefs, and 9 to 10 pfennigs per dozen of larger size. The finished handkerchiefs are delivered to the weaving mill at Niedercunnersdorf, from whence they are exported.

6. Hemstitch and open-work is done at Ober and Niederoderwitz, Barthelsdorf near Herrnhut, Ruppertsdorf, Strohwalde, Gr. Schönau, more particularly however, in Zittau ; hemstitch work is also done to a large extent as a home industry. The wages paid amount to $1\frac{1}{2}$ to 2 pfennigs per metre, and for double rider's edge work, 3 to 4 pfennigs per metre. For double hemstitch work sewn upon the 33-23 machines, 1.3 to 1.5 pfennigs per metre are paid, and for that sewn upon the 33-25 machines only 1 to $1\frac{1}{4}$ pfennigs per meter. These hemstitch articles are made for the linen weaving mills, and some Silesian factories also send their goods to Zittau to be sewn in the home.

Home Industry in the Annaberg Territory.

NAME OF PLACE.	WORK EXECUTED	SUPPLIED TO.	WEEKLY WAGES.
Annaberg.	Haberdashery.	Dealers.	About M6 to M10
Buchholz.	do.	do.	do.
Sehma.	do.	do.	do.
Cranrahl.	do.	do.	do.
Neudorf.	do.	do.	do.
Bärenstein.	do.	do.	do.
Königswalde.	do.	do.	do.
Grumbach.	do.	do.	do.
Crottendorf.	do.	do.	do.
Schlettau.	do.	do.	do.
Scheibenberg.	do.	do.	do.
Geyer.	do.	do.	do.
Schoenfried'rsdorf	do.	do.	do.
Aue	Sewing of Linen Goods.	Factories.	about M10 to M12
Bockau.	do.	do.	do.
Lauter.	do.	do.	do.
Lössnitz.	do.	do.	do.
Grünstadel.	do.	do.	do.
Schwarzenberg.	Lace Weaving.	Dealers.	about M6 to M8
Bermsgrün.	do.	do.	do.
Rittersgrün.	do.	do.	do.
Brietenbrunn.	do.	do.	do.
Satzung.	do.	do.	do.
Johann-Georgenstadt.	Sewing of Kid Gloves.	Factories.	about M8 to M10
Oberwiesenthal.	do.	do.	do.
Thum.	Hosiery Work.	do.	do.
Gelenau.	do.	do.	do.
Auerbach i/Erzgeb	do.	do.	do.
Herold.	do.	do.	do.
Drehbach.	do.	do.	do.
Venusberg.	do.	do.	do.
Groszaltersdorf.	do.	do.	do.
Zschopau.	do.	do.	do.
Marienbergl.	Corsets.	do.	about M6 to M12
Do.	Crochet Work.	do.	do. M5 to M8
Jöhstadt.	Aprons.	do.	do. M8 to M12
Oberpfannenstil.	do.	do.	do. M8 to M10.
Olbernhau.	Toys.	Wholesale Firms	uncertain.
Zöblitz.	do.	do.	do
Zwönitz.	Stitching of Boot-uppers.	Factories.	about M10 to M12
Do.	Woven goods.	do.	about M8 to M10

In the first place Plauen must be mentioned as a town in which aprons and children's dresses are made. The work is mostly distributed in Plauen and a few places in the near neighbourhood, such as Ober- and Unter-Neundorf, Neuen-

saby, Ober- and Unterlosa. As these places are largely agricultural districts, home industry is only carried on by a few who, before being married, worked in the factories, and who are now employed by the same firm at home.

Corsets are now almost exclusively sewn in the factories, the manufacture of these as home work, having decreased considerably. Such goods are made by home workers at Oelsnitz i/V, and in the surrounding places—Vogtsberg, Raschau, Lauterbach, Ebmath, Posseck, and Brambach.

Linen goods of every description, such as bibs, jackets, collars, cuffs, shirt fronts, aprons, etc., are made at Auerbach i/V, and sewn at home both in Auerbach and the surrounding places of Rebesgrun, Rutzengrun, Brunn, Reumtengrun, Sorga. The principal centres of home industry are Rode-wisch, Rothenkirchen, Wernesgrün, etc., which however are situated in Zwickau territory; still the people in these places frequently work for Auerbach manufacturers. Leather-cloth aprons as well as waxcloth bibs are made at Treuen, Rautenkranz, and Tannenbergstal.

The principal industry with sewing machines is the mending of embroidery, and the sewing together of fancy collars. This kind of work is distributed in all places where embroidery machines are mounted—in Plauen, Falkenstein, Auerbach, Ellefeld, Mühlgrün, Bergen, Grünbach, Pausa, Mühltröff, Tanna, Gesell, Oelsnitz i/V, Treuen, Elsterberg. In some places a so-called factor system has been introduced, *i.e.*, a number of persons call at the factory for the work, these factors collect the finished goods, returning same to the manufacturer. This kind of work refers more particularly to the sewing of fancy collars, Greiz, Netzschkau, Oelsnitz i/V, Erlbach, Zwota, Wernitzgrun, being centres for same.

NOTE BY EDITOR.—It will be seen from the foregoing description of machine sewing in Belgium and Germany, that men are employed in connection therewith; further, that the majority of home work is done for firms who supply the material and find the market.

The contributors of this article exhibit a range of photographs in the "Home Industries Section" showing various manufactures in progress in the home.

In considering the wages earned the reader should bear in mind the cost of living in Germany and Belgium as compared with this country. See Page 68.

Industries Carried on in France.

*Specially secured for the Home Industries Section by
Monsieur LEFEUVRE MEAULLE, Consul for France
in Ireland.*

FANS.

THE making, or, to be exact, the mounting of fans is only done in Paris.

The work consists of mounting the fan (the part which serves the purpose of fanning, and which is of skin, silk, or lace) on sticks of tortoise-shell, bone, ivory, wood, etc. This does not refer to the small cheap fans, which are made and mounted in the provincial printing establishments, and which are generally advertisements for the shopkeepers, who give them to their customers.

The work (only women are employed) consists in cutting out the fan from the raw material—silk, skin, lace, etc.—in pleating and in glueing together the two pieces thus cut out, each to form a side, in such a way that the sticks of the fan are fastened between the two sides, and, if necessary, in securing the fan into the sticks by stitching.

In a large number of the workshops the work of cutting-out, pleating, mounting, and, where necessary, repairing is entrusted to the same worker : but the embroidering, stitching on of spangles, etc., is usually done outside the workshops on the already mounted fan.

The pay of the worker who can cut-out, pleat, mount and repair is from 3s. 2d. (4f.) to 4s. (5f.) per day. The lowest wage for a skilled worker is 4½d. (0f.50) per hour.

The length of the working day is supposed to be ten hours, but, except during exceptionally busy times, it is usually eight hours.

The apprenticeship lasts for two years. Some years ago the apprentices paid a certain fee to learn their trade, but now they expect to be paid almost as soon as they enter the workshops.

The raw materials come, according to their nature, from various places.

The mother-of-pearl, ivory, gold, tortoise-shell, horn, etc., come from the factories of the district of Méru, which is the centre of the fancy turnery trade.

Skin, paper, silk, lace, etc., the untanned sheep-skin, and swan-skin (really sheep) from Haute-Saone, rice paper from Japan, silk from Lyons, China, Japan ; lace from Belgium (expensive kinds) and from Calais (cheap kinds).

In Paris and its suburbs are found those who paint the fans : men usually do the decorations and landscapes, women the flowers.

When the work is so arranged that each worker puts on a different colour, the male workers sometimes earn as much as 5s. 7d. (7f.) per day ; the female workers about half as much.

No motor power of any kind is utilised in the making of fans.

RIBBONS.

The ribbon industry is partly carried on in factories employing a large staff of workers (about a sixth of the total number of looms are employed in the factories). There are about 25,000 looms at work in the two departments of Loire and Haute-Loire—the centres of the ribbon industry.

There are—1st, the workers in the large factories ; 2nd, the owners of workshops ; 3rd, the ribbon makers working at home ; 4th, the owners of small workshops who employ two or three fellow-workers. Besides these there are the female workers, the warpers, the spinners, and the winders.

The apprenticeship is usually made with the working weavers. As in all other trades it is much shorter than formerly. The apprentice pays his expenses some months after his introduction into the workshop.

The foreman in the workshop earns from 2s. 4d. (3f.) to 6s. 4d. (8f.) according to his skill and the season ; for the prices vary according to the season and the demand.

The weaver earns from 1s. (1f.50) to 1s. 7d. (2f.) per day. The worker in a small workshop generally receives about half the price received for the output of the loom at which he works, that is to say, half of 2s. 4d. (3f.) and up to 6s. 4d. (8f.) ; but the expensive kinds of ribbons are seldom given to these journey-hands, as the owner of the looms usually reserves them for himself, besides they require a certain skill which the ordinary journey-hand does not usually possess. From the wages of the journey-hand one must deduct 1½d. (0f.20) to 2d. (0f.30) for the cost of the motor power of the loom at which he works.

The female workers, folders and warpers, earn about 1s. (1f.50) to 2s. (2f.50) ; the apprentices, 1s. (1f.50) ; the winders, 7d. (0f.75) per day.

One-sixth or one-eighth of the number of working days among weavers may be deducted for stoppages, etc.

The usual length of the working day is about ten hours, but in the small workshops the master and journey-hands often work eleven, and sometimes sixteen hours per day.

The motor power in the factories is supplied by steam ; in the smaller workshops gas engines were used for some years, but these were soon given up owing to the increased cost and inconvenience of these engines. Since 1894 electric power, generated either by water or steam, has been used. The cost of the hire of such power is 8s. (10f.) per month per loom, and period of inaction is deducted. Without this deduction the cost is 5s. 2d. (6f.50) per month per loom. It has been calculated that the output of a loom has been increased 25 per cent. since electric power has replaced the hand-loom.

It was calculated in 1904 that about 11,000 looms for ribbon and velvet were worked by electricity ; this is about half the number of the looms used in the district.

Silk comes from the surrounding districts where silk is spun, large quantities from Italy and from the East (China, Japan), etc. ; cotton comes from North America and Egypt, and cotton thread from England.

ARTIFICIAL FLOWERS.

In Paris the apprenticeship for both male and female workers lasts from two to three years. The chief work of the male worker is :—

1st.—The cutting out by means of a punch (done by hand and with a special punch).

2nd.—Goffering with special irons. (These irons are manufactured elsewhere, not in the workshops).

3rd.—The preparing of the colours and dyes. It is usually the raw material which is dyed, and seldom the finished article. This worker has the charge of the dyeing, colouring with the brush, and the colouring by means of powder (with steam).

Among the female workers some make flowers, others leaves ; the latter make the flower stems and foliage and fix them ; the former gum on the flower petals and fruits ; those who make the leaves mount the finished flowers.

The wages are, for the cutters, from 4s. (5f.) to 5s. 7d. (7f.) or 6s. 4d. (8f.) per day, generally 5s. 7d. (7f.). The apprentices earn from 1s. 4d. (1f.75) to 2s. 9d. (3f.50) per day, according to their skill and the length of time that they have been apprenticed. The dyers get from 6s. 4d. (8f.) to 9s. 7d. (12f.) per day, usually 8s. (10f.).

The dyer is paid even when work is at a standstill. He has a fixed salary of about 48s. (60f.) per week. He frequently works overtime, for which the pay is higher in proportion.

The errand boy, who often does the cutting out of the cheaper articles, earns 4s. (5f.) per day.

The men usually work for about ten hours in the day (they do no work in their homes).

The forewomen receive £7 14s (180f.) per month (in general); a bonus of about £8 (200f.) per annum.

A beginner in flower work earns from 1s. 7d. (2f.), 2s. (2f.50) to 2s. 9d. (3f.50) per day. The following example shows the wages of a beginner who in 1904 had already served two years' apprenticeship:—Up to 1904 she received 4½d. (0f.50) per week, then 9½d. (1f.) up to 8s. (10f.) per week. She has worked by the piece since 1905. Her daily earnings were 2s. (2f.50) in 1905, 2s. 2d. (2f.75) in 1906, 2s. 4d. (3f.) in 1907. She sometimes works by the day on special patterns, and earns 2s. 9d. (3f.50).

For the female workers in the workrooms (both by the piece for the ordinary work, and by the hour for new kinds of work) the average daily wage is 3s. 2d. (4f.); but they often earn up to 22s. (28f.) or 25s. (32f.) per week when they work overtime at home in the evenings.

For those who make foliage the average wage is 4s. (5f.) per day. The work is paid for both by the piece and by the day; the weekly wage in the season often comes up to 32s. (40f.) when work is done at home in the evenings.

Besides there is a large number of workers who only follow this trade at home, and who at the same time do their household work. These workers earn, perhaps, 12s. (15f.) or 16s. (20f.) per week; they make both flowers and foliage.

The length of the working day in the workshops is usually ten hours; but much overtime is worked at home.

No kind of machinery is used; all the work is done by hand.

The cotton and muslin fabrics come from St. Quentin; the silk, figured cambric, satin, and velvet from Lyons.

In the Provinces the wages are somewhat different to those in Paris. At Rheims the flower makers earn at the most 2s. 9d. (3f.50) per day (10 hours) in the workshops; in St. Joachim (Loire Inferieure) the apprentices and inexperienced hands earn 4½d. (0f.50) to 6d. (0f.65) per day (9 hours), and the women, 8d. (0f.85) to 1s. (1f.25).

NOTE BY EDITOR.—Artificial flowers are made in Ireland in small quantities, the principal industry being that conducted by the Sisters in North William Street Orphanage, Dublin, but there is undoubtedly scope for the extension of the Industry as, according to statistics, the value of exportations from France into Ireland and Great Britain thereof exceeds half a million per annum. The Industry is one requiring artistic taste and delicacy of touch, both of which are qualities easily obtainable in this country in quantity, as is evidenced by our lace and embroidery.

FEATHERS.

Women only are occupied in this industry. The work consists in sorting, dressing, and glossing the natural feathers taken from the birds, and in fixing the natural or dyed feathers on wires or frames to make various trimmings. Thus there is the first stage, that of cleaning and repairing ; and the second, that of mounting, which requires great patience.

The apprenticeship lasts for about two years. The workers earn from 4d. (0f.50) to 8s. (10f.) per week, according to the length of time during which they have been apprenticed. The new hands, or mounters, who attach the feathers to wires, earn from 1s. 2d. (1f.50) to 1s. 7d. (2f.) per day according to their apprenticeship.

The flower workers, who have been accustomed to attach the feathers with gum, pass on in the dead season to the work of mounting the feathers on artificial bodies.

A more complicated work is that of making wings, for which the worker must sort out the different shades and mount them, etc. These workers earn on an average about 3s. 2d. (4f.) in a ten hours' day.

A more difficult work still, and one which enables the worker, according to her skill, to earn up to 6s. 4d. (8f.) per day, is the making of pompoms, aigrettes and whole birds, ostrich boas, trimmings, head-dresses, etc. This work in ostrich feathers has become a speciality, and is very well paid on account of the rise in the price of the raw material.

To sum it all up, those employed in feather work can earn from 19s. (24f.) to 38s. (48f.) in a week of 60 hours.

In this industry much work is done over hours at home, as well as in the factories. In the lower branches the home worker earns about 12s. (15f.) per week ; but in the higher branches, such as feather boas, etc., it is impossible to give an estimate of the wages earned, they vary so much according to the nature of the work. The average is 60 hours per week in the workshops.

No power machinery of any kind is used, all the work is done by hand ; but for the curling of the feathers, steam produced by a low-pressure boiler is employed.

The raw materials are :—From France, the fowl and goose feathers ; from Italy, pigeons' feathers and wings ; from Austria-Hungary, white feathers, cocks' and owls' feathers ; from Egypt, sea birds ; from Senegal and the Dutch West Indies, the humming birds, birds of Paradise, etc.

There is great competition between the Provinces and Paris in the cheaper kinds of feather work ; the wages in the

former are less by half those in the latter. The centres of industry are :—Marne, Haute-Marne, Loire-et-Cher.

The total value of the industry in the Provinces per year is estimated at £80,000 (2,000,000f.). as against £600,000 (15,000,000f.) in Paris.*

MOTHER-OF-PEARL BUTTONS.

This work consists of cutting up, polishing and embellishing with designs and inlaid metal work the pieces of mother-of-pearl taken from certain shells. In the manufacture of these buttons the following are the processes which they undergo :—Cutting the mother-of-pearl from the shell, cutting it into shape, rounding, trimming, polishing and piercing, and finally, the fastening on to cards. In certain special kinds, for example, cuff buttons, there is the further process of inserting the shank, and for those on which a design is traced there is the engine turning. Most of these processes were formerly (that is to say, about ten years ago) carried on in the homes of the workers. Méru and the surrounding districts are still the centre of this industry ; but in the last few years, especially since a particularly hard kind of shell has been brought into use, workers using foot lathes at home have become much less numerous, and the workers are collected together in some large factories at Méru and Andeville, where power machinery is used.

The cutting up of the shells, the forming into shape and turning, are all done in large factories employing steam, but the other processes are carried on, for the most part, by workers using a foot lathe at home. The fixing of the buttons on cards is entrusted to women.

The wage of those who cut up the shells is about 29s. (35f.) a week, that of those who cut the mother-of-pearl into shape about 22s. 6d. (28f.) or 24s. (30f.), while those who in the mills remove the marks and flaws earn from 14s. 6d. (18f.) to 16s. (20f.) per week.

The turners (this work is usually done at home) earn about 16s. (20f.) per week ; those who insert the shanks of the buttons receive the same wage. The piercers (this work occupies both men and women in the factories) earn about 12s. (15f.) per week.

*NOTE BY EDITOR. The estimated value of prepared feathers exported by France into Ireland and Great Britain exceeds £600,000 annually, and it is estimated that in this trade and in Artificial Flower Making, over 20,000 girls and men are employed in Paris. Ireland in 1905 exported Feathers of an estimated value of £53,988.

Those who fix the buttons on cards (this work is done entirely at home) earn from 9s. 6d. (12f.) to 11s. 2d. (14f.) per week. The skilled workers who do the engine-turning and inlaying (always in their own home) earn from 32s (40f.) to 40s. (50f.) per week. All the work is paid for by the piece. The payment is almost the same in the factories as for the work done in the homes of the workers.

For the home workers the length of the working day is not fixed; it is ten hours in the workshops.

Machinery (mostly steam) is only employed by the workers in the factories for the cutting, shaping and grinding of the mother-of-pearl; for the other processes tools worked by the foot are used. Some hire the electric power in the workshops.

The sons are bound apprentices to the father. The workers up to the present have generally worked at home, aided by various members of the family; therefore, there has been no difficulty about apprenticeship.

The apprenticeship only lasts a few months, for each workman follows his own particular line, and makes use of tools which need little technical skill, only observation and strength.

The raw material, *i.e.*, the shells, come from the Seas of Japan and Australia and from the Gulf of Mexico.

TOILET BRUSHES.

The brush manufacture consists—1st, of the procuring of the material which holds the bristle and hair, of which the brush is made: 2nd, the preparing or piercing of the handle or stock: 3rd, the attaching or inserting the bristle, hair, etc.

This industry flourishes chiefly in the Department of Oise.

The buying of the raw materials, chiefly of bone, forms a large industry. Besides the retail bone merchants some houses in France (about three or four) buy in the French and foreign markets, bone with fat and flesh still adhering to it, the fat is removed and the ends of the bone sawn off. The products of this work are sold to various industries, chiefly to the gelatine manufacturers.

Next comes another great industry—the cutting up of the bones. From a bone of a certain length the worker in this branch will take off two or three slabs. These slabs are then whitened by a chemical process. The rest of the work also constitutes a large industry, but a great part of it is given out to workmen working in their own homes; likewise the piercing and preparing. In the workshops where steam power is used, and where there is a large working staff,

a machine is employed which will bore all the holes in a brush at the same time.

When working at home the workman, or even his wife, will use a lathe with a foot-treadle, which bores the holes one after the other.

In the mounting of the bristles of a brush the common articles are made by machinery, but in the finer brushes all the mounting is done by hand.

All this work is paid by the piece—the boring at so much per 1,000 holes, the mounting at so much per dozen, or else the finished brushes are paid for by the gross.

The wage of the sawyers varies from 4s. (5f.) to 4s. 9d. (6f.) a day. In the work at home the brush-makers (male) earn from 2s. 4d. (3f.) to 3s. 2d. (4f.), and female workers earn about 2s. 4d. (3f.) a day. About the same wages are paid to those who work by machinery. The children or younger hands earn about 1s. 2d. (1f.50) per day. The female brush-makers who work at home earn from 9d. (1f.) to 1s. 2d. (1f.50) per day. It is difficult to determine the exact wages earned, as the female workers are generally employed in field and household work in addition to the brush making.

The apprenticeship to this trade is of short duration; a few weeks for the sawyer and borer, who only need observation and strength, six months for those who do the mounting or inserting of the bristles, etc.

The bone comes from the English markets, from North and South America, and also, to a less extent, from the French markets.

The fine bristles for the tooth brushes are procured in France (Champagne), and from Belgium and Holland; the coarser bristles come from Leipzig and Russia, and the very coarse bristles for clothes brushes, etc., from China. On account of the increase of consumption and production there has been a considerable rise in the price of the raw material. From 9d. per pound (2f. le kilo) the market price of bristles has within late years gone up to 24s. per pound (60f. le kilo).

As to the raw materials used in mounting the brushes—timber from the woods of France and from the forests of Northern Europe are used, as well as oak and birch; the ebony comes from Central America, the ivory from the Congo and Abyssinia; the ivory market is at Anvers.

No power machinery is used, except in the large factories, for the first part of the work, *i.e.*, the sawing and planing, or in the manufacture of the commoner articles for the boring and mounting.

PASSEMENTERIE.

This work is made by hand according to a design given by the contractor to the workers, who work at home. It consists of braids or edgings made by hand with needles; the edgings of threads of coloured silk, the braid, of pearls and gold thread.

The apprenticeship is arranged in the family; the daughters are apprenticed to the mother or to some female relative. This apprenticeship lasts for some weeks for the simple kinds of material, but the richer embroideries require an apprenticeship of several months. The centre of manufacture is in the north (district of Avesnes).

The usual pay, at the lowest estimates, is 1½d. per hour (0f.15), and 1s. 4d. (1f.75) to 1s. 7d. (2f.), a day for a worker doing the ordinary kind of passementerie.

There is no fixed limit of time for the working day, as the work is done at home. Similar, but more ordinary passementerie is made in Auvergne, Brassac, Issoire, etc. For this work the usual pay is 7d. (0f.75) to 10d. (1f.) a day. There is also no fixed limit of time for the working day, as the passementerie makers take their work home and do it in their own time. There is no need of machinery of any kind as all the work is done by hand in the districts.

The necessary materials for the braid and edging are obtained in France (St. Etienne, St. Chamond), and from Germany (Barmen, Elberfeld); the materials for the gold thread and metal ornaments come from Paris.

Another kind of passementerie (guimp) which is used in upholstering furniture is made in Paris. This passementerie is more intricate, being made with tassels and bobbins, and the workers (both men and women are employed) earn from 3s. 2d. (4f.) to 4s. (5f.) a day.

For this latter kind the work is very uncertain, and frequently comes to a standstill. It is usually done at home by a worker and his wife; therefore, there is no fixed limit to the length of the working day.

No machinery is needed in this trade, all is done by hand.

The materials come from St. Etienne, St. Chamond, and Germany (Barmen, Elberfeld).



Toy Making in Germany.

Specially contributed by FILIP KESLER, Berlin.

THERE is hardly an object to which the trade mark "Made in Germany" is more applicable than to the many kinds of toys for which Germany seems to have the monopoly, and which are exported from there to foreign countries to the amount of about 60 million Marks a year. While it is true that a great many toys—particularly mechanical toys—are made in France, the simpler kinds of toys, and especially those carved from wood (which, doubtless, form the majority



MAKING DOLL FURNITURE, EPPENDORF, SAXONY.

of all the toys in use), are made in Germany. Mechanical toys are now being made in great quantities and in great variety also in the German capital, and in the old town of Nuremberg, in Bavaria, which has become famous centuries ago by the manufacture of dolls and tin soldiers. But, aside from these places, there are two districts in Germany where toy making has, so to speak, become hereditary, and this is all the more remarkable as the manufacture of toys in these districts is carried on to a great extent as a home industry. The two districts in question are the lower part of Thuringia, with the small town of Sonneberg as its centre; the other district being the Saxonian Mountains near the Bohemian



MAKING SOFAS AND CHAIRS, AND EARNING 1d. to 1½d. PER DOZ.



THE FAMILY OF A MINER (SAXONY) MAKING ANIMALS

boundary, which are called the "Erzgebirge," or the Ore Mountains.

In Thuringia, where most of the dolls come from, the establishment of big factories has pretty near done away with the old home industry; yet the latter is still exercised, to a certain extent, in connection with the factory work—the factories attending to the initial part of the work, and then giving out the material to the workers at home who have to finish the article, or *vice versa*. This practice is followed also in some places in the Saxonian Mountains, where a few factories exist exclusively for dolls' furniture. The factories in these cases furnish the home workers the rough material—



THESE WORKERS EARN FROM 3/- TO 4/- PER DOZ.

that is, the boards cut in shape, the silk or cotton, the wooden blocks, or whatever else is necessary for the particular piece of furniture they are making. The people—mostly women whose husbands are working in the factory themselves or at something else—call at the factory, where they are handed out the exact number of pieces necessary for a certain quantity of the furniture, not a piece more nor less, and they have to deliver the finished article within a certain time. The custom is to give each family only one particular article—one family making only chairs, the other only kitchen tables, another one sofa tables or wardrobes, and so on, so that each family must become a specialist in their work. The pay they are getting from the factories is ridiculously low, and all the members of a family, children included, have to work



MAKING HORSES AND WAGONS IN SAXONY.



MAKING CARTS AND WAGONS AT 2/8 TO 3/- PER DOZ.

with united forces to make a living from this occupation. But the people are extremely modest, their occupation leaves them no time to do any complicated cooking, and so they are mostly living on lard and potatoes, with which they seem perfectly satisfied.

Farther in the mountains the factories are fewer in number, and the toy making is carried on by the families as a business of their own, which means that they have to provide for themselves the necessary raw material, standing also the cost of it. Of course they do not furnish their articles direct to the public, nor even to the toy stores in the city, but they sell their goods to agents in the neighbouring villages, who



THIRTY YEARS A TOY MAKER.

re-sell the goods, with an immense profit, to the toy dealer or to the exporter.

There is a little place right in the heart of the mountains, about an hour's walk from the Bohemian boundary (the name of this place is Seiffen), and here the toy making, as an independent home industry, is in full swing yet. Toys have been made, in fact, in every family since generations, and each family has become a specialist for one or the other kind of toys. There are houses in which only carriages are made, there are others where only sheep and goats are carved, others are specialists for horses, others again carve only soldiers and other human figures. There is, amongst others, an old woman whose speciality is angels, which may at the

same time be used as candlesticks. She has been making these angels, according to her own confession, for over 30 years, always after the same pattern, which has originated from her own fancy, and these angels belong to the queerest figures that can be imagined. Not the entire work, of course, can be done by means of the knife : on some toys certain parts have to be turned, and as the minority of the workers are in the possession of a turning-lathe, they help each other out, the poorer ones paying their luckier fellow-citizens a small



ANGEL CANDLESTICK.

rent for the occasional use of their turning-lathe. In order to instruct the children and to prepare them for their future work, there are special courses in craftsmanship given in the village school, which are free to all the youthful inhabitants of the village. This, however, would not even be necessary, as the youths get accustomed to the work from their earliest childhood by helping their parents, and in many houses small tots may be seen sitting at the common working table and busily engaged to assist in the work of the family.

The villages in which this strange art is exercised are not so far away, geographically, from the big places of industry ; but the bad railroad connection makes them far, and most of these places are difficult to reach. So there is little doubt that in spite of our progressive century, with its tendency for mechanical production, the old primitive way of toy making will flourish in these hidden mountain villages for generations yet to come. But when all the horses and carriages and dogs and sheep and soldiers are under the Christmas tree, shining and sparkling in their faultless coat of varnish, hardly anybody will think of the poor people who made these things, and who are getting for their skilful work such a poor compensation.



MAKING TOY PIANOS AT BORSTENDORF.

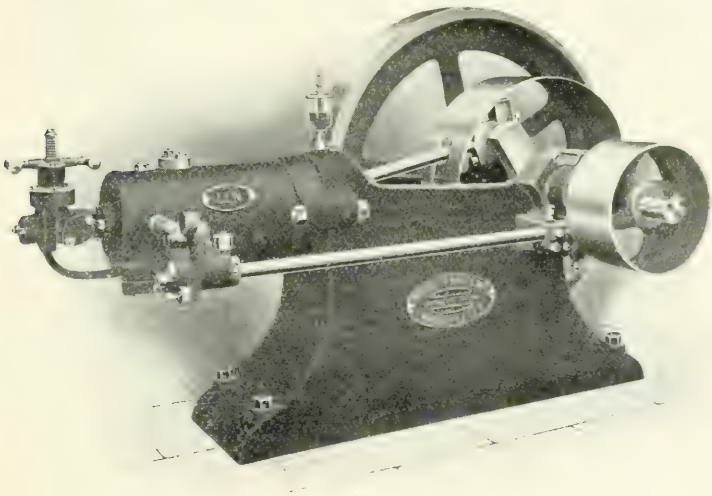
NOTE BY EDITOR. — According to the Report on toy-making issued by the German Government in 1900, it is estimated that in Thuringia alone over 30,000 hands are employed, of whom at least 75 % are engaged at home. The toy industry in Germany is estimated to employ 50,000 hands, the value of the goods being approximately £2,500,000, of which sum 1½ millions are exported, and 80 % of the exports come from Nuremberg and Sonneberg. The toy industry in Ireland is only in its infancy; dolls are made in Dublin and King's Co., and dolls' furniture and wooden toys are manufactured at Ballycastle, Cushendall, and at Castlepollard in Co. Westmeath. In 1902 the Department of Agriculture and Technical Instruction demonstrated the manufacture, bringing over a specialist from Oberammergau for the purpose, but no industry has since been established on Continental lines. — The estimated importation into Ireland in 1905 was valued at £14,830.

Utilisation of Power for Small Industries.

Specially compiled by CROSSLEY BROTHERS, LTD.

SOME 30 years ago the first gas engine was put on the market by Messrs. Crossley Brothers, and it was at once evident that its introduction was justified. Immediately it was introduced into almost every industry, and from that day onwards, wherever gas is available, the gas engine has continued to replace the engine using steam.

Where the gas engine has the advantage over the steam engine is that it answers much more readily to its load, and



STATIONARY OIL ENGINE.

that, consequently, where the working is intermittent there is economical running: the consumption of gas being strictly in relation to the load. Again, there is no cartage of coal or ashes, no smoke nuisance, little or no attention is required, and the engine is much cleaner than its competitor.

Upwards of 25 years ago gas engines were used for the following purposes. It will be seen at once how general their use immediately following their introduction:—

Bakers' Machinery, Soda Water Machinery, Meat Chopping, Electric Lighting, Engineers' Tools, Circular Saws and other Wood-working Machinery, Hoisting, Textile Machinery of all kinds, including Weaving; Sewing Machines, Stocking

Knitting Machines, Ventilating Fans, Pumping for Water Supply and Hydraulic Presses, Printing Machines, Working Drawbridge, Fog Signalling, Refrigerating for Butter, Bacon and Produce Stores, Corn Mills, etc.

After a few years, in order to effect greater economy still, a gas plant, making gas for power purposes only, was introduced ; this gas was made from anthracite coal or coke on what is now called the " pressure " principle ; but this was only adopted for comparatively large powers. In order that the needs of those who are removed from the source of ordinary town gas supply might be met, oil engines were introduced. That there was a call for them there can be no doubt. In the most remote parts of the country they may be seen working—in convents and colleges pumping water for the supply, and driving laundry machinery ; on large estates, driving dynamos for lighting ; on out-of-way farms, driving chaff cutters, corn crushers, threshing machines and other machines ; at the wayside smithy, driving blowers for the forge ; in quarries they are to be found driving saws, rubbing and polishing machines and hauling machinery ; builders and contractors are using them for wood and stone machinery, mortar mills and stone breakers : others are driving machines for grinding phosphates and other artificial manures : and hundreds are working in dairies, driving churns, separators, refrigerators, butter preserving machines, etc.

From the above instances, which are only a selection, it will be recognised at once that the oil engine is suitable for all those who are remote from any gas supply, and who do not need much motive power, say, up to 20 h.p. It may be, however, that the oil engine will also be most economical for larger sizes where the load is very intermittent. A special advantage of the oil engine is that it takes up very little room, is very easily and quickly started, and the fuel—which is common lamp oil—is obtainable in any village for a few pence per gallon.

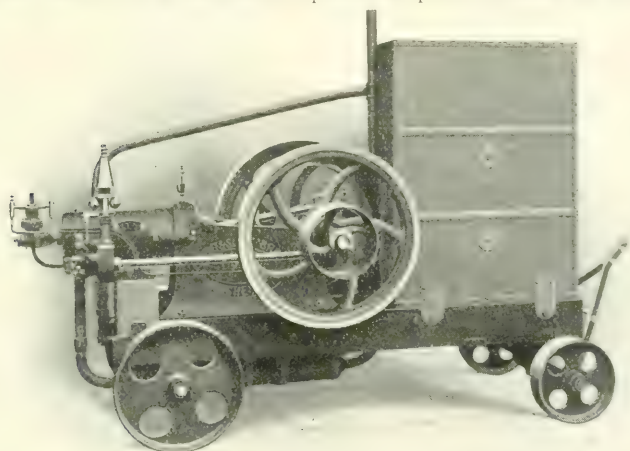
In order to meet the requirements of the small farmer a portable type of engine has just been introduced by Messrs. Crossley, and by using it a farmer can make himself practically independent of labour supply, as a little engine mounted either on wheels or timber frame, absolutely self-contained, and right for starting at any time, can be moved from one part of the farm to another at a few minutes' notice, so that the same engine can be used for a dozen different purposes in the same day, and it would be unnecessary for the farmer to collect all his driving machinery together.

A type of oil engine now rapidly coming to the front may be fitted to boats, barges, and some coasting or fishing vessels ;

in some cases the vessel is always propelled by the engine, but in others the engine is brought into use when the wind drops. Very little imagination is needed to see the advantages accruing to the up-to-date fisherman who can by this means steal a march on his slowly-going competitors, and land his catch in good time for market.

There are many cases, however, where an oil engine would prove too expensive, or at least more expensive than need be; especially is this so where the power exceeds 20 h.p., and is needed continuously.

Reference is made above to the original Producer Plant. Its success led some six or seven years ago to a new development, which took the form of producer plant on what is known



PORTABLE OIL ENGINE.

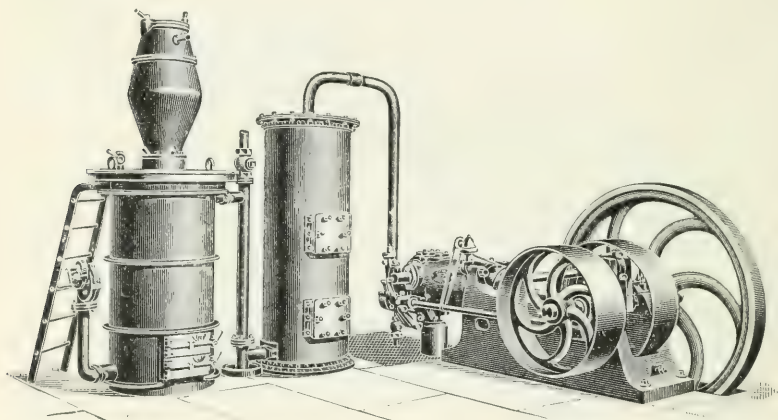
as the "suction" principle. These plants can be made much smaller than the other type, occupy considerably less space, are far more economical, and can be started much more readily.

They have been introduced largely into various industries in all countries, and many are already working satisfactorily in Ireland. It has been proved beyond doubt that a horsepower can be obtained for one hour for from seven-tenths to eight-tenths of a pound of anthracite coal: a steam engine less than 50 h.p. would undoubtedly consume five times as much coal.

Although most coal used in Ireland for these plants—and, indeed, this is the case for all purposes—comes from either

England or Scotland, there is a mine in Kilkenny from which satisfactory coal can be obtained. The owners of the colliery have recently added a washing and screening plant, so that the coal may be sent away clean and of uniform size ; this being a great advantage where it is to be used for suction plants. For those who are within easy distance of Kilkenny, this coal will be found cheaper than that imported.

Not only is economy effected by reduction in the coal bill, but there will be a further saving when labour is considered. A gas engine and suction gas plant being far simpler than a steam engine and boiler of the same powers, it is fair to assume that only about one-fifth of a man's time will be occupied in attending to both engine and producer plant,

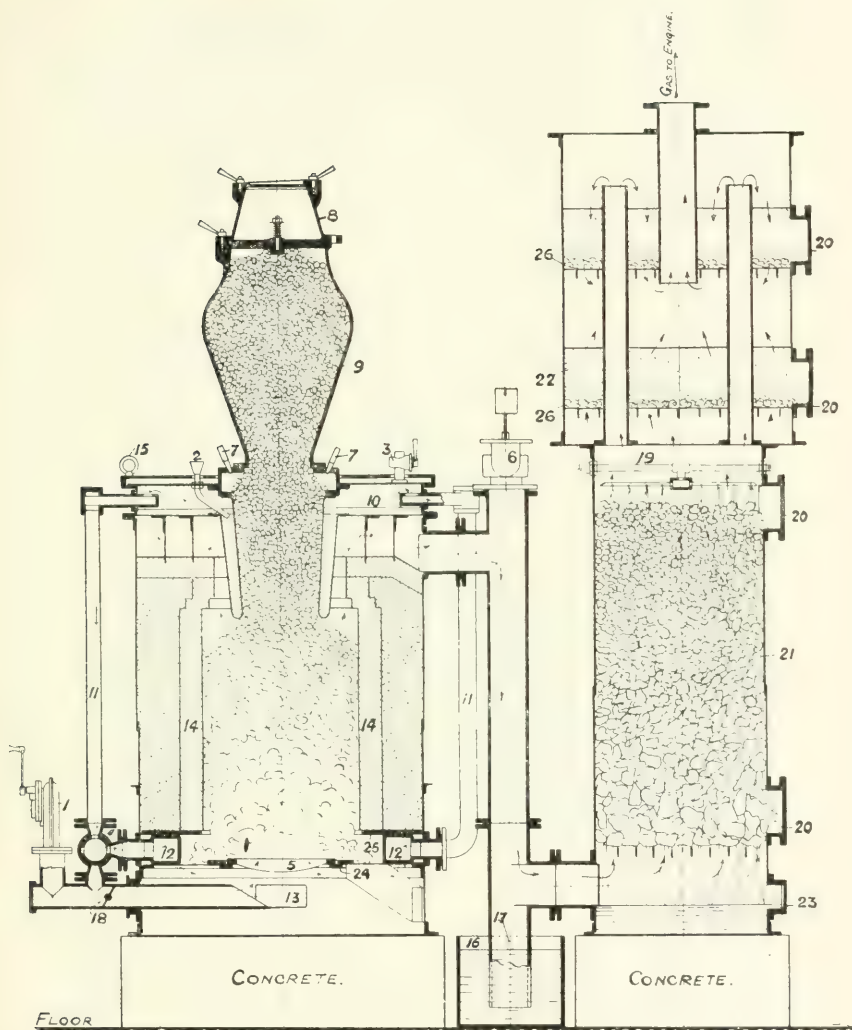


PRODUCER PLANT.
Suitable for Castlecomer Coal.

and in many cases they are looked after by the " odd man " about the establishment.

In the Home Industries Section of the Irish International Exhibition a gas engine and plant, made by Messrs. Crossley Brothers, Limited, is exhibited, with diagrammatic scale showing how a small factory or group of houses might be made and fitted to find profitable employment for a number of workers combining together ; and it is believed that very considerable extension of the Home Industries could be accomplished if this very simple suggestion were carried out.

What has been said about the introduction of towns' gas engines and oil engines into almost all industries, may be repeated here in connection with engines to work with suction gas, and in addition it can be added that large timber works,



DESCRIPTION.

- | | | |
|-----------------------------|---------------------------|-------------------------------|
| 1. Hand Fan | 10. Vaporizer | 19. Scrubber Water Spray Pipe |
| 2. Feed Water for Vaporizer | 11. Superheater Pipes | 20. Filling Doors |
| 3. Air Regulating Cock | 12. Superheaters | 21. Coke Scrubber |
| 4. Overflow from Vaporizer | 13. Firedoors | 22. Sawdust Scrubber |
| 5. Firegrate | 14. Firebrick Lining | 23. Cleaning Door |
| 6. Blow-off Cock | 15. Eye Lifting Bolts | 24. Firegrate Support |
| 7. Poker Holes and Plugs | 16. Seal Pot | 25. Firebrick Support |
| 8. Feeder | 17. Overflow for Seal Pot | 26. Layer of Shavings |
| 9. Hopper | 18. Throttle Valve | |

woollen mills, stone quarries and other businesses are now using this most up-to-date method of obtaining their power. Suction gas can also be used for heating purposes of all kinds.

It is to be hoped that in the near future it will be found that peat, which can always be obtained in Ireland, will be suitable for all powers, and Messrs. Crossley Brothers, Limited, have been making considerable experiments in this direction, and are in a position to recommend plants of 50 h.p. and upwards, specially designed to work on peat.

It must be remembered, however, that the peat, although present in such large quantities all over the country, is not



PITMOUTH ROCK COLLIERY, CASTLECOMER.

in a condition when first extracted from the bogs to be used direct—it requires to be air dried in order to get rid of the excessive moisture. Works for this treatment have been, and are being, established, and as the output develops it is certain that the increased use of peat for gas power purposes will certainly follow.

It has been proved that peat is a far more suitable fuel for gas producers than for steam boilers, and moreover 2 lbs. of air-dried peat will produce 1 h.p. per hour, as against more like 8 lbs. required in the majority of cases under a steam boiler. Also the peat used for the producer need not be

treated and dried to the same extent, and hence should be of cheaper first cost.

It is evident, therefore, that Ireland is in possession of a very valuable asset in its peat bogs, the use of which, if properly applied, should enormously increase the wealth of the country.

NOTE BY EDITOR. — In the foregoing article mention is made of the Kilkenny coal as being suitable for the production of Suction Gas. According to the Royal Commission on Coal Mining, there were over 180,000 million tons of Anthracite coal available in the region around Castlecomer, and tests that have been made with "Skehana Nuts" show that 7 of a pound of coal produces 1 h.p. per hour. This coal is reputed to be equal to the best Welsh Anthracite for the development of power by the foregoing means. At present the owner (Mr. Prior Wandesford) is working four collieries, giving employment to 500 hands, and with an annual output of 60,000 to 80,000 tons.



The Manufacture of Lace and Crochet in Ireland.

By R. M. MARTIN,

Managing Director, Irish Lace Dépôt, Ltd.

THE Irish lace industry dates from the period of the great famine. Among the philanthropists, who at that time were led to devise schemes for helping the people in their distress, were a number of ladies who rightly considered that the most effective form of charity was the providing of remunerative employment for the people. Lace making, which had been an occupation for the leisure of ladies of position, might, they thought, be pursued as a profitable industry by humble workers, and they accordingly set themselves to introduce it among the peasantry.

In the reports presented by the Relief Committees of the period one finds frequent allusions to new efforts in this direction.

Teachers were provided, and the reports speak with satisfaction of the results of their teaching. But the development of the industry was impossible without a large business organisation. Designs suitable to the changing fashions had to be provided, so that the manufactured goods could be placed to advantage upon the market. These requirements the peasant workers, however competent, could not fulfil, and when the period of distress had passed, and the Ladies' Committee had quitted the field, little progress could be made.

A step forward in the development of the industry was made when the Cork School of Art turned its attention to designs for lace. The late Mr. James Brenan, R.H.A., in the excellent paper which he contributed to the late Dr. Coyne's admirable work, "Ireland Agricultural and Industrial," gives an account of the success of the School in improving the character of the designs, and in spreading a knowledge of the principles of Art as applied to lace making.

On the commercial side much was done by the late Mr. Ben Lindsey in finding a market for the fabrics of the Irish lace makers and popularising them among people of fashion. This outlet seemed likely to be closed on his death; but, fortunately, the Countess of Aberdeen had at that time taken up the task of reviving and promoting industry in the peasant homes of Ireland, and her intervention saved the Irish Lace Dépôt as a wholesale market agency for the workers. She purchased the Dépôt from the representatives

Lace and Crochet Industry.

Marked thus 

NOTE— This Map shows General Distribution.

W. T. M. F.

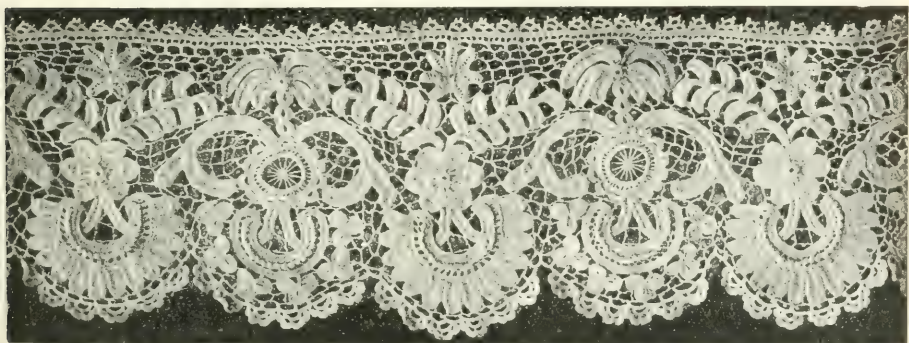


of its late owner, and before her departure to Canada, when Lord Aberdeen had been appointed Governor-General, she entrusted the management to a few gentlemen whom she had enlisted in the working of the industrial schemes with which her name will long be associated.

The *Depôt* has been developed under Lady Aberdeen's patronage, and the gentlemen who constitute the Board of Directors.

It has its representatives in the best markets of the world, and keeps the Irish lace workers in touch with the centres where the fashions are made and the course of demand determined.

Other wholesale agencies, such as the Hibernian Lace Company, have also come into the field, and the benefits of competition among buyers are thus secured for the producers.



IRISH CROCHET.

It is calculated that the annual value of the lace manufactured in Ireland cannot be less than £100,000.

As the cost of material is insignificant the greater part of the sum represents earnings by the makers and the handlers of the lace.

It is only in exceptional cases that lace making can be the substantive industry of a household. It can form the occupation only of leisure hours or of those members of a family who are unfit for more strenuous work. But if taken up earnestly and diligently pursued it may add materially to the resources of a peasant's home. This is seen most conspicuously in the Congested Districts where the Board has established classes for instruction in lace making. There are families in Mayo and Galway which had never been possessed of a cow until the younger members began to attend the lace classes, and by their intelligence and industry became

able to add from ten to fifteen shillings per week to the family income. When two or three quick-witted and nimble-fingered girls contribute in this way to the upkeep of the home, things soon begin to wear a brighter aspect. The pity of it is that in many cases these bread-winners have no sooner become capable of profitable work than they are carried away by the out-flowing stream of emigration to seek a livelihood in conditions where their acquirements will not be exercised.

But apart from the money gain other advantages have resulted for the development of the lace industry which are of hardly less economic value.

Till the existing market agencies were established the local shopkeepers were the only persons within reach to whom the lace workers in the poorer and more remote districts could dispose of their products.

The payment was made in shop goods, frequently advanced on credit before the work was completed. Under these circumstances prices were not fixed in accordance with prevailing market values, and the lace makers suffered accordingly. With the introduction of the Lace Agencies and Companies, which entered into direct relations with the workers, came a system of definite orders and cash payments which had distinct advantages, both for the pocket and character of those engaged in the lace industry.

A further benefit conferred by the new methods was the organisation of the workers for the conduct of their industry. Here, as elsewhere, combination brought to the individual advantages which could not be secured apart from it.

Organised bodies of workers could undertake large orders, and thus keep up a steady supply so necessary to meet successfully foreign competition.

Changes in fashion could also be promptly met, when the combined energies of whole Societies could be turned on demand in the required direction.

Moreover, systematic instruction of the learners became possible, as the organisation constituted a school, for which the Depôt and other agencies were willing to provide teachers.

Technical instruction has also been given on a large scale by the Congested Districts Board and by the Department of Agriculture and Technical Instruction.

Co-operative Societies were also established by the Irish Agricultural Organisation Society.

The educational value of this system of combination for business purposes cannot be over rated. Dealing with business men and subjected to business discipline, the workers were trained in habits of punctuality, accuracy and attention to details which formed an important equipment for life.

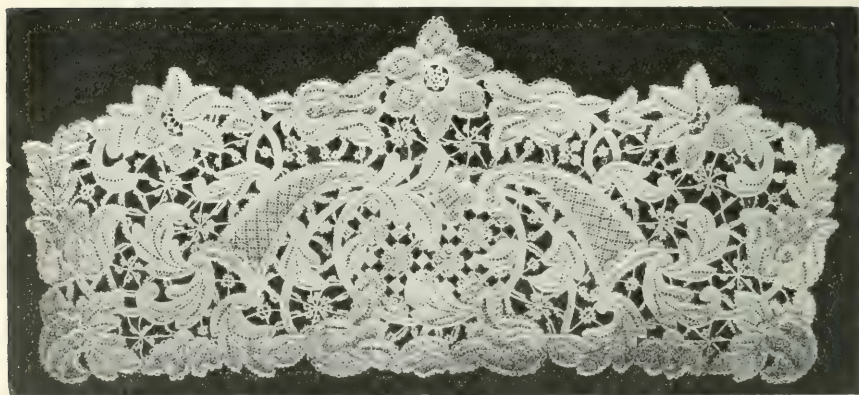


IRISH FLAT NEEDLEPOINT DRESS.
Made for the Royal Irish Industries Association.

In some centres instruction was given in drawing and the principles of design, and this instruction was found to add considerably to the working capacity of those who received it. On the whole it may be said that the lace industry, as promoted in Ireland since Lady Aberdeen undertook to develop it, has brought material, moral and intellectual benefits to those engaged in it.

So much for the general history of the Irish lace and crochet industries. The following paragraphs relating to certain centres will be of interest and emphasise the value of the trade.

Irish Flat Needlepoint and Rosepoint are the most expensive laces manufactured in Ireland. The Flat Needle-



ROSEPOINT.

point industry was founded in the famine year at Youghal, and although it is to be obtained from other centres, Youghal makes a speciality thereof. Over 200 workers are employed, and in the year 1906 the Sisters in charge of the industry paid out the sum of £5,006 12s. 6d., which sum included salaries, bonuses and pensions to old workers, the total receipts for the same period being £5,166 0s. 6d. In the same year Monsignor Keller secured a Post Office Savings Bank, and up to the end of that year over £400 had been deposited by the workers. It has been often said that this work, being of so fine a nature, must act detrimentally on the eyesight. Such is not the case, and many of the oldest lace-makers can be seen plying their trade without glasses.

Rosepoint is made under the supervision of the Sisters at the Carmelite Convent, New Ross. Only the most expert workers



ROSEPOINT LACE WORKERS, NEW ROSS.



MISS VERE O'BRIEN'S LACE WORKERS.

in flat needlepoint are so employed, as it takes years of experience before a worker can be entrusted to produce the speciality, and it is only after five or six years that a wage of 12s. per week can be realised.

The lace industry was started in New Ross as far back as 1835, but it was not until 1842 that Rosepoint was commenced. As in the case of flat needlepoint, the method of manufacture was discovered by one of the Sisterhood purchasing some scraps of fine old Venetian, and who by patiently unpicking discovered the stitches. It is to the late Mr. Brennan, R.H.A., that the Community ascribe their success, he having given a course of lectures and lessons which afforded considerable improvement in design. Medals have been gained at many



LIMERICK LACE FAN. SHAMROCK, ROSE & THISTLE.

Designed by Mrs. Vere O'Brien

of the principal Exhibitions, such as Paris, Chicago, and Glasgow.

It was in 1883 that Mrs. Vere O'Brien opened her Lace School in Limerick, and the manufacture of "run" and "tambour" has shown progress both in execution and design ever since. It has always been the aim of the promoter to use nothing but the best net and the finest thread, and to execute the best designs procurable, both modern and antique.

At present employment is afforded to 56 workers, and work is mainly carried on in the school. A good worker can earn up to 14s. a week.

The Corporation of Limerick have this year authorised the use of the City Arms as a badge of excellency.

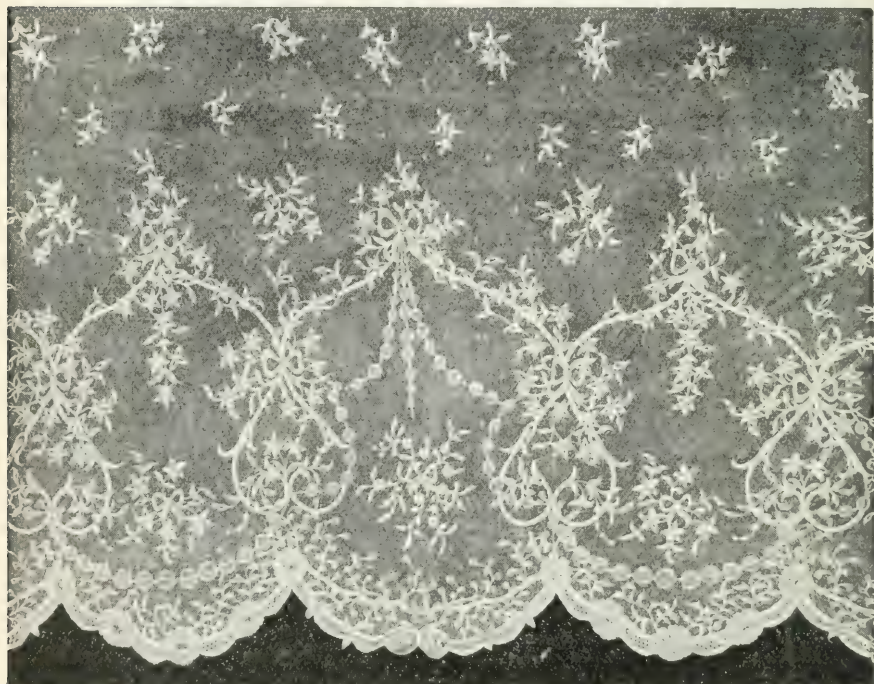


THE LACE SCHOOL, CONVENT OF MERCY, KINSALE.

Kinsale is also a centre for this speciality, and in no part of the country will a finer workroom be seen than the one in the Convent of Mercy there. The Sisters had a hard task to secure a regular demand; now, however, the demand is greater than the possible output. There are 100 girls in the workroom, and up to 50 are employed in their homes.

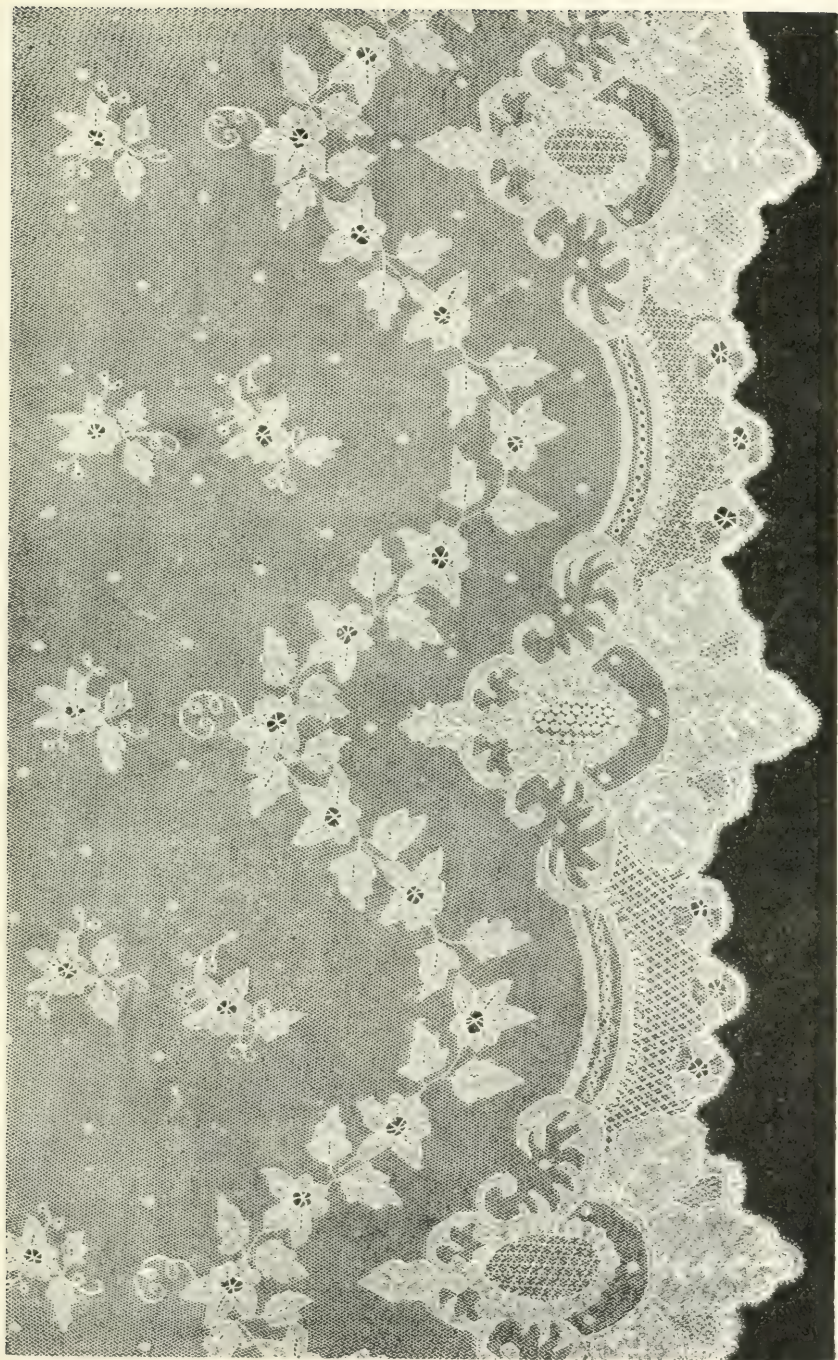
This manufacture was the means of securing £2,000 in wages last year.

No existing Irish lace industry is as old as the "appliqué"



LIMERICK LACE (TAMBOUR).

lace, which has been made in the neighbourhood of Carrickmacross since 1820. The process of its manufacture is simple enough, for the pattern is cut from cambric and applied to net with point stitches. Many accounts have been given of the origin of this lace. Some assign its genesis to India or to Persia, while the great Florentine historian, Vasari, claims the artist, Botticelli, as its inventor. In any case there can be no doubt that vast quantities were produced in Italy from the thirteenth till the seventeenth centuries. Such a specimen



LIMERICK LACE, (RUN).

it was that Mrs. Grey Porter, wife of the then Rector of Donaghmoyne, imported nearly ninety years ago, and taught her servant, Anne Steadman, to copy. This work attracted attention, and then orders—so much so that Miss Reid, of Rahans, conceived the idea of relieving the misery of the surrounding poor by giving them this new means of earning a livelihood. The first school was an outhouse in her brother's farm-yard, where she and her sister taught the girls they had gathered together to make the lace, the design for which Mrs.



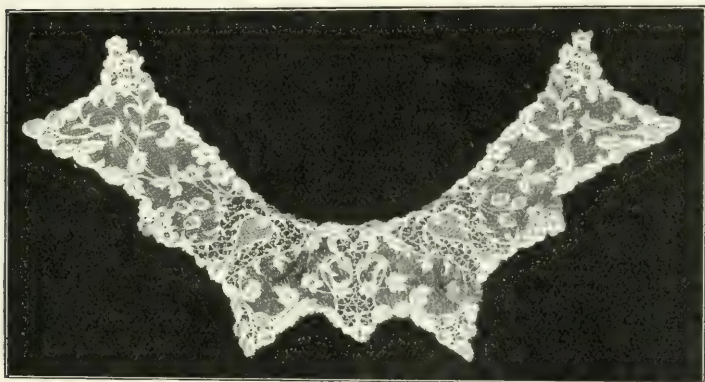
APPLIQUE & GUIPURE WORKERS, CONVENT OF ST. LOUIS, CARRICKMACROSS.

Grey Porter had imported from Italy. Though they had neither committees, subscriptions, nor Government grants the industry extended, and the number of workers grew apace. A schoolhouse was built at Culloville in Co. Armagh, and girls flocked in from the surrounding districts to learn the work, whose reputation spread far and wide. It was, however, only on private orders, and had yet to be placed on a business footing. The industry, so well begun, gradually suffered from over-production, and threatened to die out from insufficient orders, until it was revived by the disastrous Irish famine of 1846.

It was at that time that Carrickmacross became the centre of the industry, and gave its name to the appliqué work that had so long been made in the immediate neighbourhood. Mr. Tristram Kennedy was then the Manager of the Bath Estate, and in conjunction with Captain Morant, the Agent of the Shirley Estate, turned a vacant house into a school, called the "Bath and Shirley" school, which did much good work to hand down the industry to the present day.

Further steps were then taken to extend the industry by the introduction of the "guipure" lace, which is a quite distinct and equally celebrated kind of Carrickmacross lace.

This magnificent industry, like many others, suffered great depression some ten years ago; but a new stimulus was given to the work when it was then undertaken by the Sisters



APPLIQUE COLLAR MADE AT MCGOEY INSTITUTE, LONGFORD.

of St. Louis, who had some years before opened a convent in the once famous Essex Castle. Since then the work has grown steadily, till to day we see some two hundred families deriving benefit from it, many of them earning a comfortable subsistence and depending on it for the support of their homes, while others supplement the small incomes of their breadwinners by devoting their spare time to the lace. The majority of the workers attend to their household avocations and spend much of their time helping with the farm. But they take a pride, too, in being able to turn out such beautiful lace, and in being able by it to "save the rent," or buy "the seed," or keep their boys and girls from emigrating. Taking into consideration that the leisure time only is given to the lace, some idea may be formed of the importance of the industry when it is stated that something like £20,000

has been paid to the workers during the past ten years, since the industry came into the hands of the Sisters of St. Louis.

Strenuous efforts have been made to improve the pattern and to provide new and suitable designs. Girls with artistic taste have been specially trained for the purpose of designing, and as these have a knowledge of the intricacies of the lace, they are the better able to cope with the difficulty of getting the design to suit the stitches.

But it may be asked : Is lace-making an industry likely to be permanent, or is the hand-made lace likely to be supplanted by the machine-made ? On this there are many opinions ; but the true one seems to be that there is a certain quality about work done by the hand that no machine can emulate. The hand-made work always shows something of the mind and character of the worker, and if the work and design be good, there is an artistic quality about Carrickmacross lace which will always recommend it to the connoisseur, and the wealthy will be ever ready to buy it.



Lace and Crochet Making in the Congested Districts of Ireland.

Under the Congested Districts Board.

THE most interesting development of the Irish Lace Industry, and certainly one which has largely directed public attention to this form of employment has been the introduction of lace making by the Congested Districts Board, to the congested districts, which roughly represent the poorest parts of Ireland. The Annual Reports of the Congested Districts Board show a steady increase in the production and earnings of those who have been provided with this form of employment under the schemes of the Board. Beginning



CREELS OF TURF.

with one or two small classes, having a very small production, ten years since, these classes have steadily grown and spread till the amount paid to workers during the year ended 31st March, 1907, was close on £24,000. The lace classes, besides bringing much needed employment and earnings to many of the poorest and most inaccessible spots in the congested districts, have also proved the undoubted artistic talent of the workers, the pupils at the Board's classes having obtained annual recognition in very numerous awards at the Royal Dublin Society's Art Industries Exhibition, besides many home and foreign exhibitions, such as those of Cork, Glasgow, St. Louis, and Milan.

Those having an expert knowledge of the Irish Lace Trade state that the lace displayed in the best shops of London,

Paris, and Vienna, has its origin, in many cases, in remote districts in the West of Ireland. It is stated that a group of young Irish girls has been observed at the window of one of the large New York departmental stores eagerly discussing the merits of an Irish Crochet costume, and from their conversation it was evident that by some strange chance they had quickly recognised lace made in their own far-distant hamlet. One girl was saying—"Sure it was Kate Mills did the joining, and my sister made the flowers." Who shall say what associations that piece of Irish Crochet may have recalled: of the thatched cottage with its turf smoke showing blue against the mountain's heathery side, of women in bright madder-dyed petticoats, of children, and donkeys with creels of turf, of flocks of geese, dogs, cattle, and men



THE POSTMAN AND HIS DONKEY.

clad in grey homespuns, of the infrequent post which comes and goes in mail bags slung over the back of the postman's donkey, of the little thatched post-office, to or from which someone may even now be sending or receiving the letter so eagerly expected. Such associations are conjured up amidst the roar of city traffic, motor 'buses, and overhead railways; and a piece of Irish Lace may easily recall such incidents, and pictures as neither author nor artist would find it easy to do justice to.

Irish Crochet, known in France as *Point d'Irlande*, is very largely used by Parisian costumiers. Carrickmacross or guipure, appliqué, Limerick, and point, have each their admirers, and lend themselves to such variety of treatment that it is not surprising that these beautiful laces have, in recent years, been in ever increasing demand.

The exhibits from the classes of the Congested Districts Board are typical of many such classes all over the West of

Ireland, and are simply specimens of the ordinary commercial lace constantly being produced to order. It is usual for workers at one centre, as for instance, Pullathomas, or Derrypark, County Mayo, to confine themselves to one sort of lace. At the lace classes carried on by the Board's teachers in the Convent of the Sisters of Charity, Benada, Tubbercurry, Co. Sligo, and from which there is a large exhibit in the Home Industries Section; Limerick, guipure, appliqué, and crochet are all most artistically produced; and the same may also be said of the St. Louis Convent, Kiltimagh, Co. Mayo. Few American tourists travelling from Cork by Bantry to Killarney can resist the temptation of purchasing some of the lace made under the supervision



C.D.B LACE CLASS, LEENANE, WITH THEIR EXCELLENCIES THE
LORD LIEUTENANT & COUNTESS OF ABERDEEN.

of the Congested Districts Board's teacher at Glengarriffe, and it is safe to say that there is hardly any place where Irish hand-made lace is sold that the work of the Congested Districts Board classes will not be found.

Her Excellency the Countess of Aberdeen has for many years taken a deep practical interest in Irish Lace, and much of the present prosperity of this beautiful industry is due to her efforts for its extension, in connection with which Her Excellency has spent both time and money in endeavouring to extend the market and push the sale of Irish Lace all over the world. Her Excellency recently visited many of the remote lace producing centres in the West of Ireland, and may be recognised in the accompanying photograph of Leenane Lace Class.

The photograph of Doohoma Lace Class also shows the workers being photographed by Her Excellency, with His Excellency the Lord Lieutenant standing behind.

Benada Lace School, which has now attained an International reputation and carried off many first prizes, medals, and awards offered for competition in recent years, was awarded by the International Jury at Milan a gold medal for the superiority of its exhibits sent to the Milan International Exhibition. This is but one of the many successes carried off, but the honour is more signal because the Exhibition was an International one, was under the patronage of His Majesty the King of Italy, and was held in Italy—the school of the most beautiful designs and the home of most exquisite laces. Italy is old in the art, and has displayed



C.D.B. LACE CLASS, DOOHOMA.
Photo by Her Excellency the Countess of Aberdeen.

greater ingenuity in the manufacture of lace than any other country. It produced the various changes in style and designs which other countries reproduced. Brussels and Alençon copied Venice; Flanders reproduced the delicate reticulations of Genoa. The "Punto di Milano" is to-day the special lace of Milan, and is worked with great effect and success in and around that city. From this can be easily gathered the pre-eminence attained by Benada, when, in the gracefulness of design in the style of its lace, and in the superior execution of the work, the Irish school has excelled the "Masters in the Art."

At the Exhibitions organised by the Royal Dublin Society Benada has, since its foundation, always competed, and always with success. In 1903 it carried off first prize for lace designs at the Royal Dublin Society;

in 1904 first prize at the Royal Dublin Society for Limerick Lace. The same year the Benada Lace was awarded the silver medal at the International Exhibition at St. Louis, U.S.A. In 1905 it again carried off first prize at the Royal Dublin Society Exhibition for Limerick Lace, second prize for Carrickmacross Lace, and first prize for designs. In the same year it obtained first prize at the examinations of the South Kensington School of Art for designs. Again at the Royal Dublin Society Exhibition, 1906, it was awarded first prize in Limerick Lace, and first in Carrickmacross.

This is a roll of honour of which any school may well feel proud, and the highest testimonial that can be given, whether regard be had to the merit of the work done, the beauty of



GROUP OF LACE WORKERS, BENADA.

design, or the excellence of the technical instruction which is imparted in the school.

The industry is situated in a very congested district in Co. Sligo, and over 200 girls are employed. Instruction is free, and the work is supervised by the Sisters of Charity, Benada Abbey: the workers being paid the full value of their output:

Distances are great, and the workers travel on foot over the mountain and through the bog up to 8 miles, the double journey of 16 miles being necessary in order to secure material and design to execute at home. Such workers come in once a week, those living within three miles of the Abbey come in twice a week.

Learners travel eight miles each way four times a week for three or four weeks until able to work at home. The average wage when proficient is 10s. per week.

Homespun Manufacture in the West of Ireland, Mayo and Kerry.

THE conditions under which homespun are produced are such as would hardly attract workers except in very remote districts on barren mountain sides, where practically no other occupation is possible as a means of using spare time during the greater part of the year. Those who still produce homespun tweeds are usually the occupiers of small mountain farms who own a few sheep, and the dyeing, carding, and spinning of the wool occupy the spare time of the women and girls of the family.



PREPARING WOOL. LEENANE, CONNEMARA.

Although the rate of remuneration for this description of work is low, it is still a considerable industry, for instance, in south-west Donegal, where the production is brought to market every month in the local fairs of Ardara and Carrick. The turnover for last year, was some 3,000 pieces, averaging about 60 yards in length.

For many reasons it seems a pity that modern methods of production in which the carding engine, and the spinning mule, with its hundreds of threads spun at once by a single attendant, have taken the place of the old hand-carding and spinning of our grandfathers' time. In those days the hum of the spinning wheel, and the rhythmic click of the hand-loom, alternated with the busy seasons of agricultural work, and the steady habit of applied home industry, and patient

THE LANCET

THE LANCET

THE LANCET

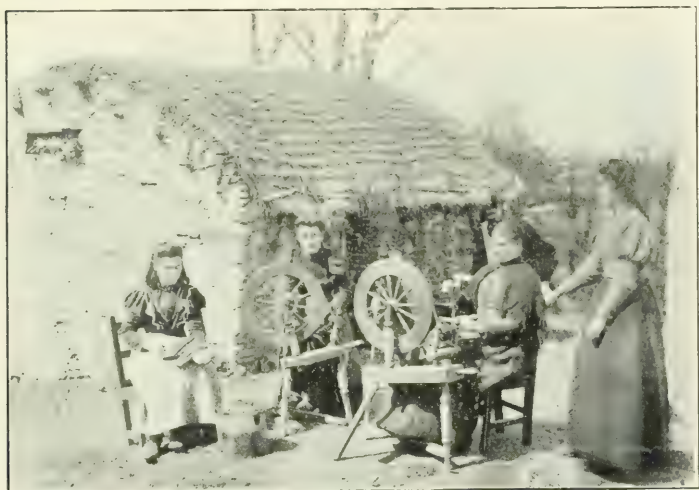
THE LANCET

THE LANCET



daily attention to detail involved in the art of dyeing, carding, spinning, and weaving, was a discipline and training, which is now, to a great extent, absent from rural life.

There is something distinctive about a piece of homespun which appeals strongly to one's fancy, and invests it with an individuality quite different from machine-made cloth. If this glamour of the homespun—which appears to specially cast its spell over those who delight in nature, and the charm of rural life—is analysed, it will be found that the association of ideas connected with the production of the homespun has much to do with this feeling. The breezy mountain side,

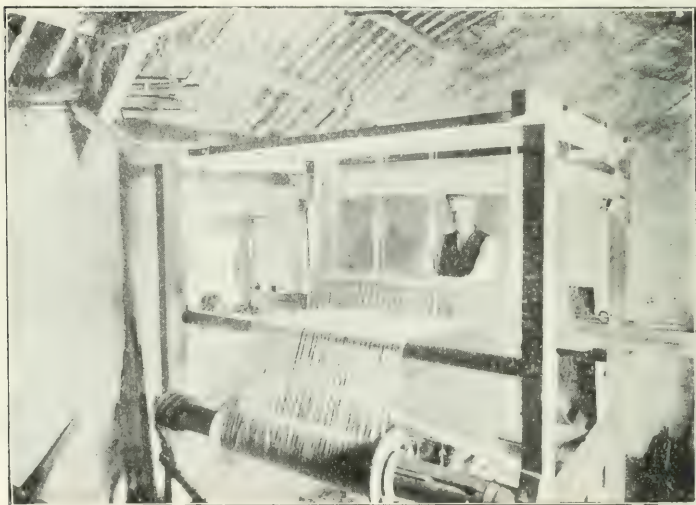


CARDING AND SPINNING. CO. DONEGAL.

with its sunshine and shadows chasing one another across the hills, here and there dotted with sheep, in the wool of which the sun produces the luminous effects so dear to artists, is the home of the homespun. The little black lambs, which so mysteriously recur in almost regular proportion, are nature's black and brown, ready to the hand of the spinner. The homespun is truly wedded to the landscape. On rock and stone grow the grey crotal, lichen, which affords such rich red shades; the leaves, twigs, and flowers of the mountain heather, and of the bracken fern, yield various shades of yellow. The root and leaves of the yellow Iris (Saggon), and the bitter fruit of the stunted blackthorn are boiled to produce blue-black, while the roots of the bramble produce brown-black shades, and the leaves and berries of the blæberry,

when ripe, are a source of homespun blue, a dyeing secret, which the colour of one's lips and fingers, after youthful pursuit of the blæberry might have led us to anticipate.

Truly the homespun is interwoven with all our associations of western rural life. The carrying home of the turf creels which replenish the fire under the often filled dye pot. The gossip of women and girls over their carding ; the hum of the grandmother's spinning-wheel, which puts the infant asleep as it lies in its deal rocking-cradle, the winding of bobbins to meet the frequent call of the weaver for more weft, and the final washing of the finished web, where, close to the edge of some mountain stream, the largest pot is set to boil, and



WEAVING HOMESPUNS. CO. DONEGAL.

bare-legged boys and girls step in and out of the tub of soapsuds as they wash out the oil from the web by treading it with their feet.

Each homespun web has an individuality. It can never again be absolutely matched. The depth of shade given by vegetable dyes varies wonderfully. It is affected by conditions of dry or wet weather preceding the gathering of the dye stuff. The shade varies according to the quantity of vegetable dye used in relation to the quantity of wool, and it varies also as regards the temperature and quantity of the liquid in the dye pot, and the duration of its stay in that liquid. So that in a land where the use of weights and scales, as well as of thermometers is unknown, and where clocks are

disregarded, the matching of shades has not yet developed into an exact science.

Notwithstanding its inherent tendency to vary, it is wonderful how uniformly even the colours come out in each web. This is brought about by careful mixing and teasing in bulk of the numerous pot-fulls of dyed wool composing the yarn. The demand for genuine homespun is almost exclusively amongst better class people who use it largely for golfing, fishing, shooting, and motoring outfits, and it is not a little surprising to find that a family living in some remote glen, say, of the Donegal Highlands, and working under conditions which make them farmers, shepherds, dyers,



WEAVERS TAKING WEBS TO C.D.B. DEPÔT, CARRICK, CO. DONEGAL.

carders, spinners, designers, weavers, and finishers by turn, produces a material which exactly suits the fastidious taste of the best-dressed people in this country. It must ever be a matter for poignant regret that economic conditions are such that the remuneration which the homespun producers receive for all their toil and care, is such a small part of the cost to the wearer of a homespun suit or costume.

It is not possible to set back the hands of the clock in modern industrial progress, and the great textile industries of the world will, no doubt, show an ever increasing tendency to introduce more self-acting machinery, and employ relatively fewer workers at a reduced cost of production. The homespun, however, occupies a peculiar position since, as has been shown, it appeals to sentiment, and caters for a restricted and more or less exclusive trade. There is every prospect that

where a genuine homespun, honestly made, and tastefully designed, is produced, it will continue to find a ready market, and the demand for such an article at present is in excess of the supply.

For a considerable number of years the Congested Districts Board have endeavoured to encourage the producers of home-spuns in congested districts, by giving loans on easy terms of repayment for the purchase of improved looms, reeds, heddles, shuttles, spinning wheels, &c., which have been largely availed of. The Congested Districts Board, also assisted in various schemes for the improvement of homespuns which were initiated by Lady Aberdeen in connection with the Irish Industries Association. The Board still continues to measure and inspect webs at the monthly fairs at Ardara and Carrick, Co. Donegal, and prizes are offered to those who produce webs of a recognised quality. The Board have also given weaving instruction at numerous centres throughout Donegal, Leitrim, Sligo, Galway, Mayo, Kerry, and Cork, and classes at which practical instruction in dyeing was given, as well as instruction in weaving, have quite recently been held at Leenane, Co. Galway, and Glengarriffe, Co. Cork.

The manufacture of homespuns in the Co. Mayo is not, as yet, organised on the same lines as in the Co. Donegal, but a very flourishing industry exists around Castlebar.

This was started in the year 1891 by the Countess of Lucan, and Castlebar homespun tweeds are in growing demand. The spinning is all done by hand, the wool used is from the local sheep, and weaving is executed on the old-fashioned looms.

In the wild mountainous district of South Kerry, near Kenmare, more particularly in that part lying between Kenmare River and Bantry Bay, home-spinning and weaving abound. The excellence of the material made, both in quality and appearance, has made it a great favourite where known, and now a considerable trade is done in it by many first-class houses in London and the provinces, and with many who buy direct from the locality.

In the Kerry Mountains there is a breed of small, hardy sheep, noted for the fine quality of their wool, which cannot be excelled by any of the wools produced at home. This wool is the foundation of the excellence of the Kenmare Homespuns.

Several of the peasantry have tried the Scotch breed of sheep in the Kenmare district. These, though very hardy and easily reared, produce a very coarse wool.

The Congested Districts Board, who are making such efforts to improve the breed of cattle and sheep, have, of recent years,

offered to procure good Cheviot rams and sell them to the peasantry at much reduced prices. Many have availed themselves of this, and the Board's action ought to result in much benefit to the homespun manufacturer, as the Cheviot wool is very suitable for homespun, and the sheep are of a hardy breed.

The sheep are first well washed, and when dry are shorn; the white fleeces being kept separate from the black, or, rather, dark brown. Then a little oil is mixed with the wool, and in the old time all the women of the family would sit around the blazing peat fire on a winter's night with lighting "splinters" of bog deal stuck here and there, each woman with a pair of wool cards—*i.e.*, light slabs of beech wood about 5 inches wide by 10 long, with handles at the side, covered all over at one side with fine wire teeth. With these they combed out the fibres, and made up the wool into long "rolls" about as thick as one's finger. In these days carding in Kerry is principally done by machinery in the carding mills. When the wool is carded the spinning wheels are called into play. The woman stands at the large spinning wheel and with the left hand attaches an end of a "roll" of wool to the spindle, then she turns the wheel with her right, which, by means of an endless band, causes the spindle to revolve very rapidly. Holding the "roll" in her left hand, she draws it out towards her as it is being twisted, until it is sufficiently fine, and continues the revolution till the requisite twist is attained, which should be greater in the thread used in the "chain," or warp, than that used in the "filling," or weft. A great deal of practice is required to attain the skill necessary to spin a thread of even thickness and twist. When the "roll" she is operating on is spun, the thread is allowed to pass from the outer end to the inner part of the spindle, and by a revolution of the wheel is wound up on it. And then another "roll" is attached to the end of the thread, and the same course repeated. When the spindle is full another is put in, and when all the spindles are exhausted, the woman sits down, puts the end of the spindle between her ankle and boot, or, if barefooted, grasps the spindle with her toes, and winds the thread on to a large ball, which often weighs up to 14 lbs. weight. It is considered good work for a woman to spin 2 to 2½ lbs. of thread in a day.

Next in order comes the warping. A large wooden frame is made with wooden pegs at each side, about 6 inches apart. A man or woman gets two balls of the white thread spun for "chain" or warp, and takes a thread from each ball in the hand, and, commencing at the top, stretches the

threads (two at a time) around the pegs from side to side till the bottom is reached, and then back again, continuing until about 600 threads are laid down, each thread being often up to 80 or 90 yards long; so that to "warp" a piece of homespun requires that the man or woman doing it should walk about five miles backwards and forwards before the warping frame. Then the weaver puts it into the loom, fills the shuttle, usually with the black thread, and weaves the pattern of material required.

When woven the piece is still full of the oil that has been put into the wool before carding. This must all be well washed out and the piece dried, when it is ready for market.

Such is the process of manufacture of the "Kenmare Homespun," and so it has continued here for centuries. Elsewhere a spinning-wheel has been introduced, which is worked by the foot: but, though these wheels have been used in Kerry for spinning flax, the peasants prefer the large hand-wheel for wool. They say it makes a better thread. Certainly, for appearance and wearing qualities their homespun cannot be outdone; and on hygienic principles they must be right, as almost all are made from the natural undyed black and white wool.

The sale for these homespun is constant, and increasing as they are getting better known. In 1903 His Majesty the King visited the locality, and was accorded an enthusiastic welcome by the peasantry. He purchased largely of these homespun at the Depot—aptly named "*The Spinning-wheel*"—in Kenmare, and in encouragement of the efforts of the peasantry he conferred the Royal Warrant of Appointment upon the proprietor, who provides employment for large numbers of the peasants in the manufacture of the homespun in their own cottages.



The Manufacture of Hand-tufted Carpets in Ireland.

The Donegal Carpet.

SOME seven years since the Congested Districts Board induced Messrs. A. Morton & Co., of Darvel, Ayrshire, to visit Donegal with the object of introducing the manufacture of hand-tufted carpets as an industry in the West of Ireland.

Work was commenced by Messrs. Morton at Killybegs, in a hayloft which was rented for the purpose, and it being found that the workers took to the work, Messrs. Morton built large permanent factory premises at Killybegs, and a year afterwards a second factory was built at Kilcar, eight



MESSRS. MORTON'S FACTORY, CROLLY, GWEEDORE.

miles west from Killybegs. A year or two later a third factory was erected further north in the district known as the Rosses, at Crolly, where there is a station on the Letterkenny and Burtonport Railway, and more recently a fourth factory was built at Annagry, about four miles from Crolly station.

The Donegal carpets are entirely made by hand, and the traditionally quick-fingered Donegal girls have shown that they are not only quick with their fingers, but are also clever at picking up designs, and recognising the fine variations of shade required in the industry. A large percentage of the cost of the Donegal carpets is the labour expended by putting in the tufts by hand, which is a tedious operation. These carpets have to compete against the well-known carpets of

India, Persia, and Turkey, as well as against similarly made goods produced on the Continent, and are therefore subject to considerable competition.

Several of the Donegal carpets have been supplied to Royalty in this and in other countries. One was supplied for Osborne to the order of the late Queen Victoria, and amongst other orders was a saloon carpet for the royal yacht, four carpets for Windsor, several for his Royal Highness the Prince of Wales, and H.R.H. the Duke of Connaught. Carpets have also been supplied for the Prime Minister's residence at Downing Street; the White House, Washington; and the Government House at Ottawa. Numerous carpets have also been made for the modern palatial hotels, some of which have been of enormous size, and weighed several tons when complete.

There is something about the soft, springing, mossy feeling of a Donegal carpet underfoot which makes all other carpets afterwards feel thin, hard, and boardy in comparison; and, while in machine-made carpets everything must be adhered to, and the same patterns constantly repeated, the Donegal hand-tufted carpets can be varied indefinitely in design, color, size, shape, or quality, to the requirements of purchasers. These qualities make them very attractive to architects as well as to those carrying out original schemes of artistic decoration.

The market for these carpets is world-wide, and the high quality of the work, artistic design, and harmonious blending of colors, have secured for them a recognition by the best houses in this country, on the Continent, and in America. Messrs. Liberty & Co., amongst many others, are large purchasers, and have had special exhibitions at which the artistic value of these beautiful carpets have been demonstrated.

The allegorical rug shown in the Home Industries Section was designed for her own home by Mrs. G. A. Watts, and illustrates how even the design of a hearthrug may be invested with a meaning, symbolic, amongst other things, of chequered human life, and into which has been woven the ancient legend of the stork which tore the flesh from its own breast to feed its hungry nestlings.

The Abbeyleix Carpet.

Abbeyleix is a rising carpet-making centre, and as the attached pictures will show, the manufacture there is carried on in different method from that in Donegal and Naas. It was commenced in 1904 with three girls, but now



INTERIORS OF ABBEYLEIX FACTORY.

affords employment to forty. It was Viscount de Vesci, the owner of the town, who inaugurated the industry to afford employment to the girls there who would have otherwise left the district. They earn, according to competence, from 3s. to 12s. 6d. per week and the trade is increasing in volume. Markets quite unexpected have been secured, and Canada is taking some of the output. The stitch is a patented one.

The Kildare Carpet.

The manufacture of carpets in the town of Naas was begun in a small way in December, 1902, the Gaelic League being the initiators thereof. At first work was carried on in the workroom at Naas Convent, but larger premises being required, a loft in a disused mill was taken up for the purpose. For two years the rugs produced were sold as opportunity afforded, but it was realised that unless the business could be run on commercial lines a failure must result. Accordingly in 1904 the Naas Co-operative Home Industries Society, who own the industry, decided to take still larger premises, and to apply for further capital. This, amounting to £1,000, was immediately subscribed, and a vacant malt house was taken and converted into a properly equipped workshop with suitable offices. Looms ranging from 4 to 20ft. were erected, whereby anything from the smallest rug to a carpet 20ft. in width and to any length could be manufactured. The most important step, and one necessary to ensure success, was the decision of the Society to establish a permanent connection with a wholesale carpet manufacturing firm, and through its agency to secure orders and dispose of the entire products of the factory. Thirty hands are employed, and the manufacture of Tufted Carpets, under the name of "The Kildare Carpet," has become an important feature in the town. The aptitude which the workers have displayed in their training has surprised the firm, and it clearly disposes of the question so often put in similar cases, as to why it is necessary to go elsewhere for requirements when such excellent material can be produced at home. As Donegal and Darvel are allied so are Kildare and Kidderminster.



IRELAND.

Showing the
Woollen Factories,
Large & Small.

Marked thus ★



The Woollen Industry in Ireland.

Anon.

Similente Passamo in Irlanda
La qual fra noi e degna fama
Per le nobile saie che si manda.

SUCH were the lines written in the 14th century regarding Irish Woollens, and if our stuffs were excellent in those days and worthy of export, surely it is equally true to-day. But that we are not making the most of our opportunities is again evidenced by figures lately issued by the Department of Agriculture and Technical Instruction.

We imported during the year 1905 woollen goods to the value of £883,370, and we exported 10,682,438 lbs. weight of wool, valued at £550,814. These figures show conclusively that there is much room for development in the woollen manufacture.

It is an interesting fact that the manufacture of woollens is the staple textile industry of the South of Ireland, as will be seen by the map, and according to the last Census 5,284 hands were engaged in the trade in Ireland.

Those manufacturers who have marched with the times and who have erected modern equipments in their factories, are getting a firmer position in the markets. This is not to be wondered at, as the materials in this country turned out on up-to-date methods are equal to similar materials produced elsewhere.

There are several centres into which large quantities of wool are annually brought, and which wool at present goes for manufacture to Yorkshire and Scotland. In such places, therefore, there is the nucleus for a woollen factory, as, for instance, a town on the main line between North and South, within 15 miles of a direct shipping port, having a fine water power and water carriage, and receiving annually upwards of 100,000 fleeces averaging 5 lbs., which at present go to Germany, America, and Yorkshire for treatment. Such places await a manufacturer with a thorough knowledge of his trade, and with a market established for goods capable of manufacture from the available raw material.

Finally, does it not stand to reason that the water power formerly used for the turning of heavy grinding stones in the manufacture of flour is still and equally available for the throwing of the shuttle?

NOTE BY EDITOR.—In the year 1800 over 700 hands were employed in the manufacture of blankets, in the City of Kilkenny, the capital invested being £36,000. The value of woollen goods sold in the Kilkenny market in the year named amounted to £56,000 worth. It is pleasing to note a revival of the woollen industry in that city—the City of Kilkenny Woollen Mills having lately been established, with the most up-to-date machinery.

How a Small Woollen Factory could Succeed.

By W.M. CROWAN.

A BRIEF sketch of the revival of the mills with which the writer is connected is about the most practical manner of giving concisely one's ideas on this subject.

These mills were taken over by a new proprietor in 1905, but, owing to his connection with other business concerns, he found it necessary to appoint a manager to whom he gave a very free hand. The writer—an Irishman of 22 years' experience in two leading Irish mills—took charge in September, 1905, and found that the business formerly carried on was not very profitable and that, owing to the advancing price of wool, a new departure should be made, and something very special should be put on the market. The machinery required considerable overhauling, and the looms were not fit for good class work. Badly as we were equipped, I decided to take up the Ladies' Costume Cloth trade, and in a very modest way I started with a few small neat ranges of goods which were highly praised by one or two leading buyers who took them up.

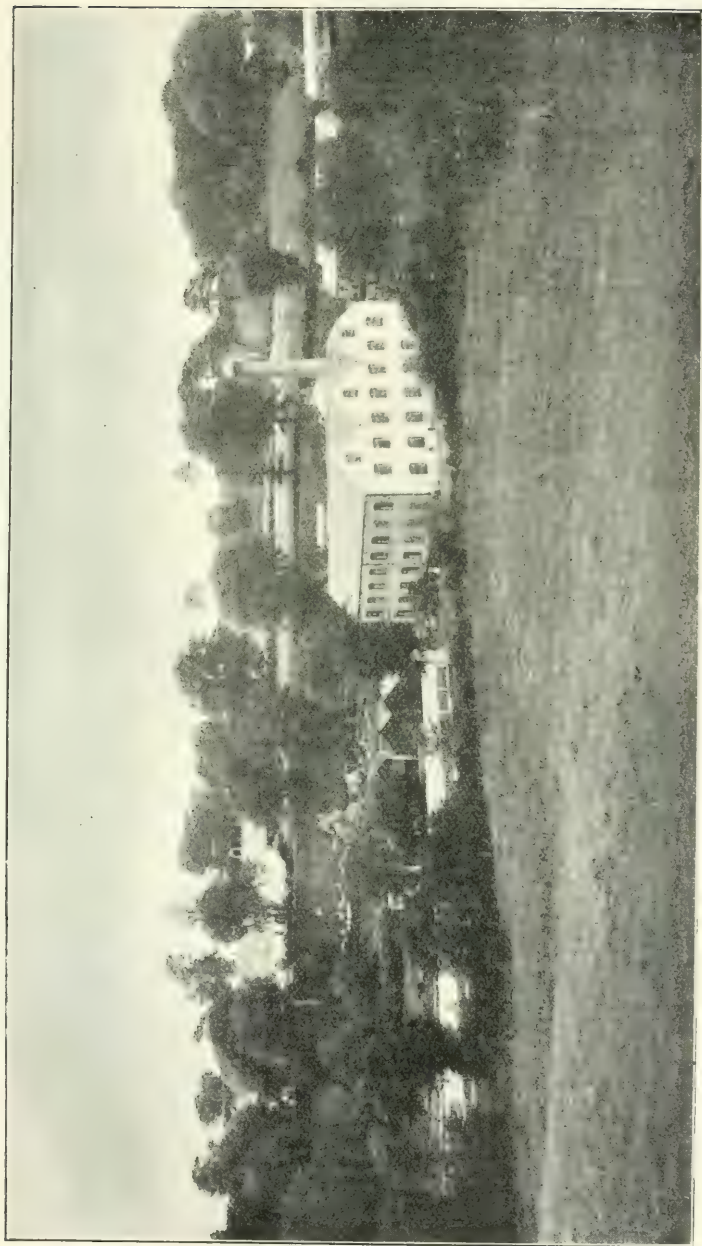
I then found that I was, all unconsciously, gifted with a good taste for coloring, and I studied designing. The results were surprising, and a few Irish houses gave us, in 1906, all the work we could undertake. Meantime we had gradually been putting in the newest Dobcross Looms, which turn out perfect work, and turn out double the quantity per week at, of course, reduced cost.

Fortified with perfect goods I faced the leading Dublin buyers (as well as Liverpool and Manchester), with again most successful results, and now, in 1907, we are doing with the very first houses in London, Glasgow, Liverpool, Dublin, Belfast and Cork; and it is generally admitted (I say it in all modesty) that our designs and colors are equal to anything produced *anywhere* in same class and character of material.

Added to these characteristics of our materials was the effective way in which we advertised our goods all over the Counties *where we wanted to sell them*. Thus curiosity was aroused, and buyers who never before stocked Irish dress goods were induced, through the enquiries of clients, to see ours.

Now as to difficulties. It was *all* difficulties, but we have surmounted most of them.

In a small mill expenses will run very high if a big staff of foremen are engaged. Hence *the* point is to get experienced men who can fill more places than one. For example: I



DRIPSEY WOOLLEN MILL, CO. CORK.

design; I go out and sell almost every yard we make; I come back and see the goods are made *right*, and up to time, etc. Our book-keeper is an expert dyer! and our principal foreman is "everything else!" If we had to pay a separate manager, designer, dyer, book-keeper, traveller, etc., we would be swamped.

Then there is the difficulty of expanding. This is not an industrial centre, and we have to train all our hands, and the actual fact is that there is absolutely not one person over 14 to be had for three miles around now, and we could do with half a dozen to-day. We have no choice, and how are we to increase with no population to draw workers from?

Difficulties about capital. We had none, fortunately, but they are very obvious. Without capital machinery cannot be kept up to date, and it is all-important to be able to put in the very newest looms, etc., and finishing plant. Without capital wool cannot be bought economically and stocked in large quantities, and of course without capital there can be no expansion of business. Where capital is wanted there is invariably an over-drawn bank account, the interest on which eats up all profits.

The absence of a technical training college in Ireland, and particularly in Cork, which is the centre of the woollen industry, is a great drawback.

Young fellows who are filling minor positions in the mills have no chance whatever of acquiring any technical knowledge of the business, and so they can get no promotion and foreigners must be imported for the principal posts. If these young men had a chance of attending evening classes we would have in a few years a splendid lot of trained hands who would put new life into many of the small mills which have almost died out through old-fashioned methods necessitated by the absence of skilled workers.

No other difficulties occur to me. Getting the right men is the secret of success. The workers I find most industrious, honest and sober, and most anxious to do all in their power to get the work out satisfactorily. The market is at hand for the goods if they are value for the money both in quality and design, and in Ireland the writer can vouch from his own personal experience that the Buyers in the large warehouses, as well as the drapers in the towns, are most favourably disposed towards Irish-made goods when business-like methods are adopted, and when the goods are offered on terms that permit the Buyers reselling on lines that give the usual trade profit. The Buyers give every facility and every encouragement to the Irish mills, and no manufacturer can say he did

not get a fair chance provided always his goods and his methods are *right*.

Our output now is exactly double of 1905, and as expenses are *not* increased in proportion, our working is eminently satisfactory, notwithstanding that wool reached the highest point for 25 years in 1906. We are making every effort to still further increase our output, and if we were near a city where there are so many unemployed, we could go ahead very rapidly.

I have no hesitation in saying that mills of this size have splendid possibilities IF in capable hands, and I know that in certain other branches of the woollen business there are great opportunities for any small mill that specialises as we have done—on one line, and does that properly. Most of the small mills I know have not a ghost of a chance of enlarging, owing to lack of modern ideas, capital and machinery, but principally “ideas.”

It is no easy matter to get together such a staff as we have here, but, I suppose, this could be got over by advertising.

In Ireland we dispose of almost all we make, and we only touch the cities and large towns. In London we are represented by a firm of agents who do an enormous business, and who sell more Bradford and German goods in one day than we could make in a year. *They could sell our goods just as readily if we could supply*; but we cannot, and so they confine our goods to *four* of the first houses in London, who take all we are able to spare out of Ireland. There is an unlimited market for certain woollen goods in London; but goods must be right in quality and price (and by that I don't mean they must be *cheap*—on the contrary, a better price can be got in London for good, classy stuff than at home); they must be perfectly finished, tastefully designed, etc., and then a lot depends on getting the right agents in London.



Hand-loom Linen, Cambric, and Damask Weaving, and Linen Embroidery.

By W. R. McMURRAY.

THE hand-loom industry of Ireland dates from very early days ; but little except private trading was done before the 17th century, at the beginning of which some attempt was made to organise an export trade, and at the end of the century linens were exported to the value of £15,000. This trade increased very rapidly until by the middle of the 18th century there was an export trade of $1\frac{1}{4}$ millions. There



WINDING FINE YARN FOR THE HAND-LOOM.

are at the present time some 1,000 hand-loom employed in the manufacture of Damasks in the North of Ireland, many less than even a decade ago ; but the increased perfection of the power-loom manufactures has materially decreased the demand for hand-woven Damasks. Some of the very finest Damasks and Cambrics are not woven by power, the very fine yarns not being able to stand the strain of the power-loom. The excellence of hand-woven Damasks is due to the following facts :—

- (1.) All preparatory processes for the hand-loom are carried on by hand, and the yarn arrives at the loom in the best condition.

IRELAND.

NOTE_ WEAVING Principally Co^s Antrim, Down & Armagh.

Showing the Counties
where Handloom Damask
Linen and Cambric Weaving,
Handkerchief and Linen
Embroidery is carried on
as a Home Industry for
Northern Manufacturers.



- (2.) The loom, and the method of working it, are capable of very wide variation. By this means the very best results are obtained from a given quantity of material, and the designer is practically unrestricted, with the result that Irish designers have produced some of the highest class of decorative designs the world has ever seen.



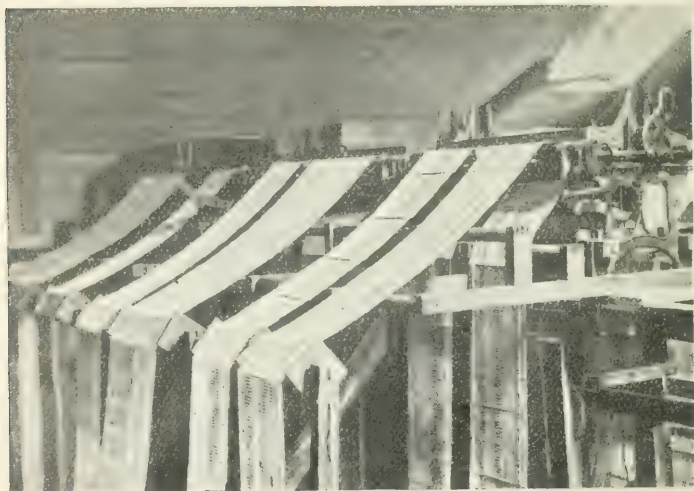
PREPARING THE PATTERN CARDS FOR DAMASK.

The conditions of labour are much healthier. There are no overheated or artificially humidified rooms, no dust, and none of the noise and dirt inseparable from power-driven machinery.

The training is much better for the weaver. He has full control of the whole process, and must necessarily be alert and watchful of all points.

An unique factory is the hand-loom factory at Ardoyne, the property of John S. Brown & Sons, Limited. Erected in the year 1819, the same looms are now working that were

originally put in ; some forty or fifty are kept employed. The work here is not, strictly speaking, a cottage industry, as the looms are collected in shops ; but the conditions of labour are similar, or even better. The weaver is not asked to pay rent for his loom, neither is he at any expense for heating, lighting, etc. His loom is kept in good order for him, and he is assisted in all changes of apparatus, and receives help in cases of difficulty. A good steady workman can always make from 25s. to 40s. per week, while in special cases as much as 60s. weekly is earned. A large proportion of the weavers live in the village which surrounds the factory. No restraint whatever is placed upon their movements ; any



THE CARDS WHICH PRODUCE THE DAMASK DESIGNS AT ARDOYNE.

weaver can walk in and out as he likes during working hours (6 a.m. to 6 p.m.). The strain of weaving on a wide handloom is very great, and a weaver cannot keep it up for long without a rest. To show that the life at the Ardoyne factory is not at all unhealthy, one weaver has been continuously employed there for 63 years, two others for nearly 50 years, two others more than 40 years, while seven or eight have a record of from 25 to 35 years. Not only are the men of a family employed, but employment is also found for the women. The wives and daughters of a family wind pirns for the men ; this work is actually done in the dwelling-houses.

The quality of work produced by a hand-loom depends upon three factors :—

- (1.) The class of raw material employed.
- (2.) The efficiency and general state of the loom and apparatus connected with it.
- (3.) Lastly, and principally, upon the personal and individual skill of the weaver.

All these points must receive careful and continuous attention if the best results are to be obtained.

Material used.—In these Works nothing but the very best and finest class of linen yarns are used.

Looms and Apparatus are maintained in the highest state of efficiency, without which it would be impossible to produce the very finest fabrics. All looms and machinery being collected together in the workshops, can easily be watched and attended to, and specially skilled labour is supplied for this purpose to assist the weavers.

Individual Skill.—But even although close on 100 years of experience lies behind the system of the place, that system can never supply the necessity for highly-skilled tradesmen. The individual skill of the weaver will make itself apparent in the work he turns out, and the training and directing of this skill must occupy a large proportion of the care of the management.

Weavers capable of dealing with the best work cannot be trained in a few years. A long and careful course of training through various grades of work is generally necessary, and it is noticeable that the skill so acquired appears to descend from father to son.

Capital is not required by the workers, as, if labour were forthcoming of a skilled character, manufacturers would be ready to supply material and design, take out-put and pay wages earned; a skilled worker after two or three years can earn 25s. to 30s. per week.

The County of Down is the centre of the cottage hand-loom industry, and contains more looms than all the other counties where this industry has taken root, viz. —Armagh, Antrim, Londonderry and Donegal. A very few looms may be found in other counties not named, but to all intents and purposes these counties are the industrial ones of Ireland, and not only turn out all the hand-loom manufactures, but also practically all the

Linen Cambrics.

There are now some 3,000 hand-loom employed in the weaving of linen cambrics, none of which are collected in factories, but all are in the workers' own cottages, and are distributed, about 80 per cent. in the county Down, and 10

per cent. each in the counties of Armagh and Antrim. There has been a decrease in the number of hand-loom employed on these goods of fully 25 per cent. during the last 10 years, while in the same space of time the power-loom weaving cambrics have more than doubled, and are slowly but surely driving the hand-loom to the wall.

The winding and warping for these looms is no longer done in the workers' own cottages, but is all done in the various power mills and given out to the workers, who have nothing more to do than prepare the loom and weave the goods. Until recently this winding and warping was all done in the weavers' cottages by other members of the family, so that with a 25 per cent. reduction of hand-loom, and a total abolition of winding and warping in the cottages, it is computed that there are fully 50 per cent. less people employed on this industry than was the case 10 years ago.

The wages earned in weaving plain cambrics would average between 8s. per week earned by learning boys and girls to 18s. per week earned by the skilled men.

Rather more than this is made by weavers weaving the fancy cambric cloth now so largely used, especially in the American trade, for handkerchiefs and blouses. When these fancies were introduced some three years ago the workers, not being accustomed to the work, were paid on a higher basis, and now having become expert they are able to make up to 20s. or 22s. per week, no reduction having taken place in the basis of wages owing to the great demand for these goods.

Undoubtedly hand-loom will always be employed on the finer grade of goods, but the industry must be looked upon as a decreasing one, and the large number of workers once employed have gradually been absorbed by the power factories, and by the bane of Ireland—Emigration.

Hand-embroidered Linens.

This branch of the linen trade, quite an unimportant one a few years ago, has now grown to be almost the most important. A demand has sprung up all over the world for these goods, which could not be supplied from Ireland, and other countries are now competing. Japan, China, Madeira, and the Canary Islands employ thousands of workers embroidering, almost entirely, Irish linens. Each country has its own distinguishing features in its embroidery, easily recognised; but no work comes up to that of the Irish peasant, and the supply of these goods has never yet met the demand. Here, as in the hand-loom industry, the

individuality of the worker is largely stamped on the work turned out, and the agents throughout the country, who give out the work among the cottages, soon get to know each

worker's speciality, and give out heavy or fine work as best suited to each individual.

Many thousand peasant girls are employed in this industry in Ulster, and if the girls in the other three Provinces could only be trained to do as good work, plenty of employment would be found for all. If only a small sum were devoted to establishing schools through the South and



A "CLARE EMBROIDERY" FROCK.

West to teach this embroidery work, how much more money would be distributed through poverty-stricken districts.

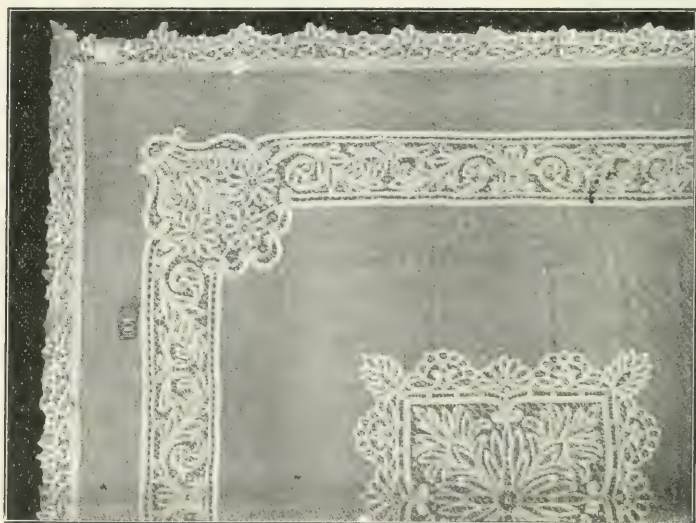
NOTE BY EDITOR.—Within the last few years a completely new form of embroidery has sprung into existence in this country. It is styled "Clare Embroidery," and was commenced in the year 1892 by Mrs. Vere O'Brien. It is now being carried on successfully in several centres of that county. The characteristics of the Industry are the employment of coloured threads on washing materials and with original designs. The major portion of the trade is confined to children's frocks and pinafores, and goods find a ready market in South Africa, India, and Jamaica. In connection with this Industry "Smocking" has been revived.

At Marlfield, near Clonmel, embroidery was introduced in 1885 by Mrs. Bagwell. The designs used are mostly of a foreign nature, and here again garments for children are a speciality, and of a washable nature. The value of the Industry to the inhabitants is evidenced by their homes.

Connemara Curtain Making.

THE production of Connemara curtains, like the manufacture of hand-tufted carpets, was first introduced into Ireland by the Congested Districts Board. Some years since German and Swiss workers were brought over by the Congested Districts Board to give instruction in making this handsome lace in the West of Ireland. Their place has long since been taken by Irish girls who readily learned the industry now carried on in south-west Galway at Carraroe and Kilkerrin, and on Lettermore and Gorumna Islands.

Connemara lace curtains are made on a strong linen mesh net on which linen braids of various widths and patterns are sewn, so as to compose the design. The description of



SECTION OF "CONNEMARA" BEDSPREAD.

lace work lends itself particularly well to the reproduction of intricate interlaced forms of Celtic design, and many strikingly handsome curtain borders are reproductions of the wonderful designs found in such profusion in the Book of Kells. Connemara hand-made curtains have a bold and handsome effect, which harmonises well in a room with a Donegal carpet, with the rich effect of which the ordinary machine-made curtain is hardly in keeping. The materials and designs of these curtains are supplied, and the production taken by Messrs. A. Morton & Co., Darvel, Ayrshire, and they can be obtained from the principal carpet and curtain warehouses in Dublin, and throughout the United Kingdom. This lace is also made in handsome table centres, bed-spreads, and other suitable objects of decorative art.

Showing the Counties
where Shirt Manufacture
is carried on as a
Home Industry for
Londonderry Manufacturers.



Shirt Making in Counties Londonderry and Donegal.

By the Editor.

FEW outside those engaged in the trade and those acquainted with industrial employment in this country are aware that the principal centre of the shirt making industry, not alone in the British Isles, but the world, is the City of Londonderry and the adjacent town of Strabane. As in Northampton the boot industry is the staple employment, so in the City on the Foyle prosperity is very largely dependent on the manufacture of shirts, collars, and cuffs. No country is untouched, and all races receive their requirements from the North-west of Ireland mainly. As Londonderry is dependent on shirt making, so the Counties of Londonderry and Donegal are dependent on that city; for if there be a slump in the factory, there is a greater slump in the homes employed in sewing for the large manufacturers. It is estimated that over 80,000 hands are employed in factory, auxiliary factory, and home.

The home worker has no anxiety regarding the raw material or market for the finished article; these two branches are supervised in the Derry factory. There the material is cut, and the parcels are sent out in dozens to the districts, to the local agent, with accessories, *i.e.*, buttons, etc. He, or she, distributes to the sewer and collects when complete, paying the worker, and despatching to the central factory. The work is mostly piece-work, and 9s. is the wage earned generally by sewers when trained.

Small factories have been established in certain districts where the amount of concentrated and trained labour warranted the step, and such pleasing instances of progress are to be found in Cardonagh, Buncrana and Letterkenny.

A branch of the shirt industry, *viz.*, the manufacture of collars, cuffs and fronts, is a growing one in and around Belfast, but mainly a factory one, over 40 firms being so engaged.

Shirt making is also carried on, on a small scale, in other parts of the country (*vide* Mullaghbawn hereafter).

A Mountain Parish—Its Past and its Present.

By the Editor.

MULLAGHBAWN, or Mullabawn (the White Hill) is a mountain parish in the southern corner of the Co. Armagh, surrounded by hills forming a natural wall, in fact it may be termed a punch bowl of humanity. To the north and west lie Slieve-Brack (the Speckled Mountain), the Carriff, Carrick-na-Gavina, and the Lislea Mountains with their jagged points ;



THE VILLAGE OF MULLAGHBAWN.

while to the south lies the cosy little town of Forkhill, with its background of woodland, and to the east Slievegullion rears its lofty head 1,893 feet above sea level. The district has a past full of interest to the lovers of folk-lore, and an industrial prosperity which made itself renowned long before Belfast was a manufacturing centre.

To look down upon this "punch bowl" from the crest of Slievegullion a picture is to be witnessed which, while it may be equalled, could not be excelled. As far as the eye can reach north, south, east and west are to be seen neat little homesteads, with their whitewashed walls, embedded in patches of green and gold, in the valley and on the mountain

side, the smoke curling upwards, while surrounding the whole at one period of the year is a fringe of gold, when the gorse blooms, and at a later period, one of purple, when the heather holds its sway. Such is the picture on a fine day in Spring or Autumn, with the lark singing its lay, and although few people are to be seen, one realises from those patches of cultivation stretching through the valley on each side of the river, and reaching up high towards Slievegullion's crest, that the inhabitants are industrious to a degree. Here will be seen flax, and there a half-acre of corn, changing in hue as the wind fans them to and fro. At night the scene alters, but is no less impressive, and as daylight fades and one again



SLIEVEGULLION MOUNTAIN.—"THE SENTINEL AND PUNCHBOWL."

takes up a position on the shoulder of the great sentinel, light after light dots the valley, marking out each homestead, and imagination would almost make one think that the canopy had become the carpet of the beholder.

Such then is a brief description of a place worthy of visit by students of rural economy.

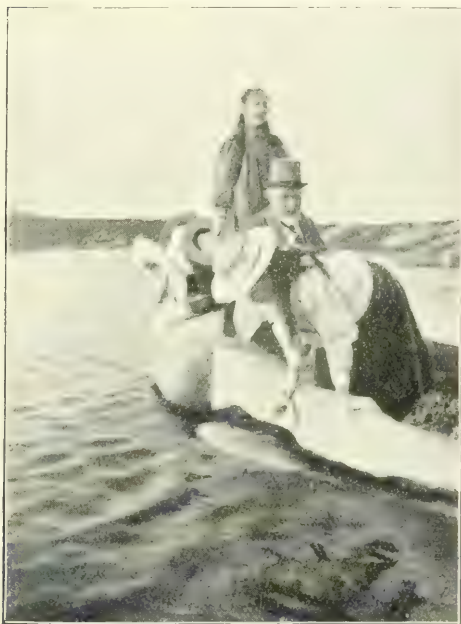
Slievegullion, or Sliabh Culainn, "the Mountain of Holly," ranks as one of the highest points in Ulster. From its summit can be seen the Counties of Down, Armagh, Monaghan, Cavan, Louth, Meath, Dublin and Wicklow, and the district has yet to be appreciated by the tourist, be he artist, naturalist, botanist, geologist, or photographer, and while there

is ample food for his mind, sustenance for his body is plentiful and good in Newry and Dundalk. Near by lies Edward Bruce (brother to Robert), who was killed at the Battle of Dundalk on 5th October, 1317. But while around Slievegullion there is much of interest to be seen, the mountain itself holds a record in folk-lore second to none, for it was here—as recorded by Dr. Joyce in his “Irish Names of Places”—that Culand, a great artificer in metals, had his residence and kept a forge, and it is related that on one occasion he went to the palace of Emania to invite King Conor McNessa and the Red Branch Knights to a feast. Setanta (son of Sualtan, King of Dune Dalgan), who was then a small boy, was also invited, for he happened to be at the palace at the very time; but when the company set out he remained behind to finish a game of ball with his companion, saying that he would follow very soon. He started off in the evening, and arrived late at Culand's residence; but when he attempted to enter the house he found the way barred by an enormous dog, which was kept by Culand to guard his premises at night. The savage beast instantly set on him, but the brave little fellow, in no degree terrified, valiantly defended himself. When Culand and his guests heard the dreadful uproar outside, the smith started up and asked in great alarm whether any of the company had remained behind, for no one, he said, had ever approached the house at night without being torn in pieces by the dog. Then the King all at once recollected how Setanta had promised to follow him and Fergus MacRoigh and several others of the guests rushed out to save him; but when they came to the place they found the great dog lying dead and the young hero standing over him. Fergus, in great delight, snatched up the boy in triumph, and brought him into the house and placed him on the floor in the presence of the King and the whole assembly, who received him with great joy. Culand, after he had first given vent to his gladness at the boy's escape, immediately fell to lamenting his dog, complaining that his house and flocks would now have to remain unprotected; but young Setanta at once said that he would procure him a puppy of the same breed if one could be found in all Erin, from Tonn Tuath (mouth of the Bann) in the North to the Wave of Cleena (Glandore Harbour) in the South: and he offered, moreover, to take upon himself the charge of guarding the house at night till the dog should be sufficiently grown to take his place. Thereupon the King's Druid, Cathbad, who happened to be present, proposed that the boy's name should be changed to Cuchulainn (Culand's Hound), and he declared that he should be so known to all

future generations, and that his fame and renown should live for ever among the men of Erin and Alban.

There is a lake on top of Slievegullion, and according to a fascinating story in Tempest's "Louthiana," this lake was the scene of a tragedy.

Culand aforementioned had two beautiful daughters, who both loved Finn. Aina said she would never marry a man with grey hair. Milucra heard this, and determined that if she could not marry Finn she would prevent her sister from doing so : and accordingly she summoned the Dedannans to



SLIEVEGULLION LAKE. WHERE MILUCRA DISAPPEARED.

meet her on the mountain top, and she caused them to make a lake thereon, and she breathed a druidical virtue on the water, that all who bathed in it should become grey. The following day Finn was chasing a doe with his two hounds, Bran and Skolan, and eventually reached Slievegullion. Here the doe made a sudden turn and disappeared Finn searching one side of the hill and the hounds the other. Suddenly a plaintive cry reached his ears of a woman in trouble,

and proceeding in the direction whence it came, he found a beautiful girl sitting on the brink of a lake weeping. Finn asked her if she had seen his hounds, to which she replied in the negative. She then told him her trouble was greater than his, and again burst into tears. Finn offered to do anything in his power to lighten her sorrow. She told him that she had dropped a precious gold ring into the water, and called upon him to restore it. Without a moment's hesitation he dived and searched every nook and cranny, at last finding the lost jewel which he handed to her. Upon receiving it she dived into the lake and disappeared. It was

Milucra. As soon as Finn's feet touched dry land he lost his strength, and fell a withered grey old man. His hounds came up and sniffed at him, but not recognising him passed on.

On that day there was a banquet at Finn's palace of Allen, and the company missing the King, a search was made, and Finn was discovered but not recognised. After some time he beckoned to Kylta McRonan and whispered the secret, which Kylta imparted to all, and a wail of lamentation arose which caused the affrighted foxes and badgers to leave their dens in the mountain. A frame-work litter of slender poles was made. Finn was placed tenderly thereon and carried to the foot of the mountain, where the daughter of Culand had her dwelling deep under the ground. For three days and three nights they dug, when affrighted by the tumult, the enchantress rushed forth bearing in her hand a drinking horn of red gold. At first she appeared unwilling to hand it to the King, but seeing one Oscar, she fell in love with him, and handed the horn to Finn. Immediately his lips touched the brim his own shape and features returned, save that his hair remained silvery white. This silvery hair pleased his followers so much that Finn chose to remain grey for life. Two others drank from the horn, and a third was about to do so when it gave a twist and darted into the earth, and was never again seen. Those that drank of it had a fore-knowledge of the future. A growth of twigs sprang up where it disappeared, and it is said that anybody looking on the thicket in the morning fasting will know all things that are to happen on that day.

The district in the past was renowned for its dancing, and the deeds of the boys of Mullaghbawn have been recorded in local verse, as the following will show :—

“On a Monday morning early, as my wandering steps did lead me
Down by a farmer's station, through meadow and green lawn,
I heard great lamentation as the small birds they were warbling,
Saying we'll have no more engagements with the boys of Mullaghbawn.”

Other places might deal with their folklore and past history in similar manner to Dundalk and surrounding country.

I have mentioned that this district was celebrated for its manufactures before Belfast became a manufacturing centre. In 1803 Sir Charles Coote pointed out that it was difficult to find a farmer unconnected with the manufacture of linen. The holdings were seldom more than 20 and often as small as 2 acres. Many of the farmers were master weavers, and these were styled manufacturers. They did not work the looms, their time being occupied mainly at market in procuring yarn for their journeymen and in disposing of the



MULLAGHBAWN SCHOOL AS IT WAS, NOW SLIEVEGULLION SHIRT FACTORY.

webs of linen when ready. Where such a man settled he soon established a manufacturing village around him. The branches of the trade consisted of cambric, lawns, linens, diapers, damasks and checkers: the finest of goods being made in the Mullaghbawn district, and the number of looms employed exceeded the number of houses, as most contained two or three. In those days, it was pointed out, that whatever might be said of other districts, could not be charged to Mullaghbawn, namely—the want of industry. If out of work, it was due to want of employment. Industry, not idleness, was the characteristic of the inhabitants, and when weaving was dull they worked in the fields.



EXTERIOR OF SLIEVEGULLION SHIRT FACTORY.

In 1800 the Co. Armagh turned out £300,000 worth of linen, and in the year that Queen Victoria came to the throne the output was valued at half a million sterling. When power-loom weaving took the place of the hand-loom industry Mullaghbawn and the surrounding country naturally suffered. In the days of prosperity the flax was grown on the holdings; it was retted and scutched in the district, spun by the girls, and woven into linen by the men, so that one and all suffered by the change in methods. For years the inhabitants eked out an existence, the young people migrating to Scotland and England as agricultural labourers or to take up domestic service. It was in the month of

November, 1902, that a gentleman turned his attention to the "punch bowl," with a view, if possible, to better it. He realised that something must and could be done with a population exceeding 3,000 and situated in a district three miles in diameter. It is to the late Mr. Michael Magee, of Newry, one of the pioneers in the agricultural movement in this country, that the credit for the present flourishing condition of affairs primarily belongs. It was he who approached the Department of Agriculture, and pointed out the wants and the possibilities. The outcome of his active interest was the establishment of a sewing school for girls, and work commenced in September, 1903. An instructress was



INTERIOR OF SLIEVEGULLION SHIRT FACTORY.

brought in from Londonderry by the Department of Agriculture, and some foot-treadle machines were erected in a disused school. A society was formed who undertook to supply the necessary material, and to dispose of the finished goods. It was soon realised, however, that it was impossible for a voluntary society, away from the markets of the world, to compete in price with the established commercial undertakings having their markets already acquired in the neighbouring towns of Dundalk and Newry, and accordingly, all creeds and classes being agreed, it was decided to approach a manufacturer with an established trade, point out to him the possibilities of labour in the district, and offer him inducements to come in and start a factory on commercial lines.

This task was undertaken by the Rev. Peter Johnson, C.C., and he was successful in persuading Mr. Charles Mitchell, of Messrs. Hogg & Mitchell, Manchester, to investigate, and ultimately that firm to take up the manufacture of shirts in Mullaghbawn, and to-day Slievegullion factory, as depicted herein, is to be seen in full swing. This factory was opened in 1905, equipped with power machinery and lighted by electricity, and the people realising that no manufacturer from the other side of the water could be expected to come in unless local effort was shown, did what might be done in many another district. They subscribed the sum of £100 wherewith to instal motor power,



CART LEAVING FACTORY WITH GOODS FOR MANCHESTER.

and the Trustees for the Jackson Trust agreed to lease the building at a small rent for a long period of years. The Department are assisting in instruction and the County Council on their part have allocated a sum sufficient to pay for two instructresses, and have further given a guarantee sufficient to warrant the Postal Authorities in placing a Telegraph Office at the factory door. There are eight schools with a roll of 500 children in the Parish, and the National schoolmasters and mistresses are in full touch with the industry, watch the progress of their pupils, and note the names of those whom they consider suitable for employment when their period of education ceases. It is now two years

since the factory was opened as a commercial concern—a factory not without its drawbacks, in so much that it is six miles from the town of Dundalk, at which port all the raw material for feeding the factory arrives, and from which port all the goods manufactured depart; the means of transit between the factory and the port being by cart, as is shown in the accompanying picture. The goods find a market as far off as South Africa three months before the order has been executed in Slievegullion factory, and few people know that the “Metropole” shirt is being daily manufactured in the “punch bowl” described at the commencement of this article. After two years of practical experience the manufacturers are able to state that the adaptability to learn the



THE LANCASHIRE STEAM MOTOR CO.'S MOTOR LORRY AS
USED IN ENGLISH COUNTRY DISTRICTS.

details is excellent, especially amongst the youngest of the workers. They emphasise how much they are impressed by the bright intellects and the willingness to learn, and speak as to their punctuality and their adherence to business rules and regulations. They point to the necessity of improved methods of transit for country districts if they are to progress satisfactorily as part of a commercial and manufacturing entity.

But Mullaghbawn has not confined itself to the revival of manufacture. Her thoughtful men, and they are many, priest and parson, doctor, schoolmaster, County and Rural Councillor, have put their heads together with a view to making life as a whole one which would satisfy the most fastidious of occupants of the parish.

Thus, an agricultural society, organised by the "Irish Agricultural Organisation Society," is in being, and which supplies the members with tested seeds. It owns a pedigree bull, and aims at expeditiously dealing with the handling of crops by means of up-to-date machinery. This step is not to be wondered at in a district where agriculture must necessarily always be the predominant factor; but it is of interest to know that the work in connection with this Society is furthered by the one I mention hereafter, and which is carried out voluntarily by a Committee composed of local residents.

Until a few years ago the gombeen man and the shortness of money hampered progress in the district, and in 1903 an



THE BANK COMMITTEE.

agricultural bank was established, which to-day has a membership of 262, and at the time of the last return, namely—December, 1906, had a loan capital of £402 8s. 10d., and deposits amounting to £988 7s. 5d. Loans to the extent of £1,495 were granted to 172 borrowers, and the year's work showed a net profit of £16 9s. 1½d., with £25 8s. 11½d. placed to reserve, and all done for the sum of £3 1s. 9d.

The value of such a bank is demonstrated by a visit to holdings where previous to its establishment no stock was to be seen, and where to-day land allotted to such purposes is fully occupied.

Mullaghbawn has also turned its attention to the social side of the question. It has a Temperance Society and a

Fife and Drum Band, and concerts, athletic sports, football tournaments and lime-light lectures are regularly given, and as this article is being written a Village Hall is being erected, wherein entertainments of a social and educational nature can take place.

When the foregoing institutions were being established the farmers were tenants, to-day they have nearly all completed purchase of their lands.

This book deals with all sides of rural life as it is and as it might be. In this article I endeavour to describe all sides thereof as they actually exist in one district, and in a district, too, though favoured in scenic surroundings, less favoured for industrial progress than many districts in Ireland, seeking for the gate leading from despondency. If such would take Mullaghbawn as an object lesson, they would act on similar lines, for with prosperity comes comfort, and with comfort comes contentment.



The Fine Underclothing Industry

In the Counties Londonderry, and Tyrone.

By the Editor.

IT is not so many years ago when it was customary for the great majority of ladies to purchase longcloths, or cambrics and trimmings, and make up every article of underwear at home. Underclothing that was sold ready-made had poor reputation, as being made of inferior material, scanty in size, defective in shape, and comprising, generally speaking, the lower grade articles only. All this has been radically



A FAMILY OF HOME WORKERS, CO. LONDONDERRY.

changed, and no articles of attire can boast of the perfection to which the manufacture of underclothing has attained. Although a considerable proportion of the goods in the underclothing departments of drapers and outfitters is manufactured in English towns, huge quantities, employing thousands of hands, are manufactured in the North-West Districts of Ireland, where fine hand-sewing has been an important industry for many generations. No other part of England, Scotland, or Ireland is capable of producing the beautiful hand-sewn underwear which is produced there, and this quite irrespective of cost. If anyone were willing to pay as much for the making of a single gar-

ment in England as is paid for a dozen in Ireland, they could not find the hands to do it, and the result is that ladies can purchase the most beautifully made underclothing in the world, at prices so moderate as to be within every woman's reach. The whole of this industry is a Cottage one—the wives and daughters of farmers being engaged in it whenever their help is not wanted in field-work, and in this way it has proved a great blessing to large districts where no other means of supplementing the earnings from farming exist. One of the best features of this work is, *that philanthropy and sentiment have no part in it; it is conducted upon the only lines that ensure permanent success, viz.:—business*



MANUFACTURE OF FINE UNDERCLOTHING.

Giving out Work at Messrs. C. Bayer & Co.'s Station, Park, Co. Derry.

lines. One of the principal firms which has been engaged for many years past in the organisation of this industry is Messrs. Chas. Bayer & Co., whose magnificent central factory—one of the finest buildings in Londonderry, and one of the most beautiful and perfectly organized factories in the United Kingdom, furnishes abundant proof of the prosperity of an industry fraught with blessings for many thousands of the Irish peasantry. Many hundreds of workers are employed in this factory, but that which is responsible for the solid success of this industry is the combination of Derry Factory with the numerous subsidiary factories and sewing stations in Counties

Londonderry, Tyrone, and Donegal. While large quantities of garments are made up in the factory, its principal "*raison d'être*" is to serve as a clearing house for the tens of thousands of dozens which flow in continuously from the country stations, and are then dealt with in a variety of ways, before being sent up to London, whence they find their way to the uttermost ends of the earth. Large as the "hand-sewn industry" is, it shrinks into comparative insignificance by the side of the gigantic development of the "machine-made" industry, which has advanced by leaps and bounds during the last twenty years. Both are Cottage Industries. Machines are supplied to the workers by the manufacturer on "easy



MACHINE ROOM, MESSRS. BAYER & CO.'S STATION, BUNCRANA,
CO. DONEGAL.

payment" system, and eventually become their property. There are very few instances where a worker has made default in payment, and it may be said that there is hardly a cottage within 40 miles of Londonderry that has not one or more sewing machines, and so prosperous is the trade, that practically every machine is at work. Marvellous indeed is the transformation of a village or countryside where this industry has been planted, and where it has taken root. Let anyone go where it has existed for some years, and he will be surprised at the well-dressed, and, in many instances, even elegantly dressed girls and women, the wives and daughters of small farmers, whom

IRELAND.

Location of Boot Factories.

Marked thus ▶

**Showing Principal Centres
of
Hosiery Industry.**

- ★ Large Factories.
- ✚ Small Factories.
- ▲ Hand-Knitting Industries.



he will meet on Sundays or holidays. And the same feeling that causes them to take a legitimate pride in being well-dressed, is also reflected in the cottages in which they live, and, indeed, in their whole lives. Work is the salt of life, and its ennobling influence upon large districts in Ireland is, perhaps, the best and sweetest reward of those who have done good service in organizing this most successful Irish Cottage Industry.

Hosiery Manufacture in Ireland.

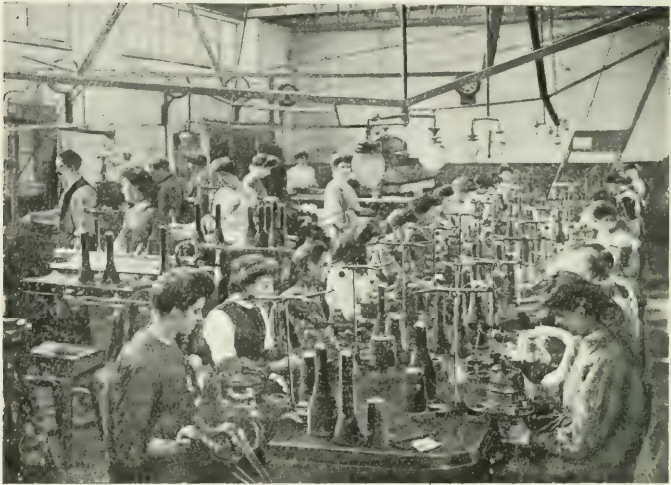
By the Editor.

THE principal seat of this industry is Balbriggan in the Co. Dublin, referred to in the next article. Hosiery was made by hand in large quantities in the commencement of the 19th century, both for home consumption and export, and was essentially a home industry.

The trade in Balbriggan was commenced in the year 1740, being of a hand-loom nature, the goods so manufactured being of very fine texture. In that town



HOME WORKERS EMBROIDERING BALBRIGGAN HOSIERY.



BANDON HOSIERY CO.—MACHINE ROOM.



BANDON HOSIERY CO.—WAREROOM.

to-day two factories equipped with the power looms are working.

There has been a considerable increase of late years in machine knitting, and several factories which have been started are making steady progress. At Newtownards there

is a fine factory, and smaller ones are to be found at Tralee, New Ross, Blackrock, Bandon, Longford and Carlow, and in a number of the convents hand-power machines have been erected.

The yarns are mostly imported, but some of the woollen manufacturers have added the branch of knitting yarns to their business, as, for instance, Messrs. Mahony, of Blarney, and the Athlone Woollen Mills.

There is a considerable home demand to be met, as hosiery to the value of £161,559 was imported in 1905.

In some districts hand-knitting still affords a considerable amount of employment, as, for instance, in the Co. Donegal round Glenties and Ardara, at Portlaw in the Co. of Waterford, and at Birr in King's Co.

Embroidery as Applied to Hosiery.

By *THOMAS E. HUDMAN.*

WHAT is Balbriggan? It can be said that, although it is only a small, but picturesque, Irish seaside town, it is a name to conjure with in connection with Hosiery Goods in all parts of the world; it is looked up to and understood to mean superiority and excellence. To deserve and keep this reputation has been no small task in the face of fierce competition of wealthy firms, and the growing tendency of machinery for turning out large quantities of cheap goods.

It is now more than 160 years since the industry was first established in a small way, but from the beginning, as to-day, the striving has been for superiority of work, and it has had many a hard struggle to maintain its hold as the premier town for high-grade hosiery.

One of its hardest fights arose out of this very excellence of quality. English and foreign makers of hosiery stamped their best goods (and also frequently their inferior), "Balbriggan," which enabled them to obtain a higher price than was possible without the aid of that name; and at the enquiry of the Select Committee of the House of Commons on the Merchandise Marks Act, these manufacturers endeavoured to maintain their right to use "Balbriggan" in a generic sense to signify the goods were of high quality, but they were unsuccessful, and the term "Balbriggan" can only be used on goods made in Balbriggan. Since that time the trade has gone on increasing to such an extent that there are now two factories (each fully employed) instead of

one, as before the enquiry. Originally the manufacture of Hosiery in Balbriggan was carried on entirely by means of hand-loom. The Coronation hose for the late Queen Victoria was manufactured thereon, and a certain portion of the finishing, such as seaming, clocking, etc., was executed by outworkers at their homes, and this established a very considerable home industry in the town and surrounding villages.

The gradual introduction of the power-loom and other machinery has almost entirely done away with this branch of the business. There is still work for the hand-loom in plenty; but the present workers are getting old, and gradually the "Old Reaper" is gathering them in, and no young learners seem willing to come forward to take their place, and it will not be many years hence when the worker of a hand-loom for Hosiery will be extinct. Other branches of work in connection with Hosiery have sprung up, affording employment in the home; thus the growing taste for embroidered goods has created a demand that is almost beyond the labour available. It is skilled work, and those engaged are highly trained, and do their work much better than workers elsewhere. This branch of the business is capable of unlimited extension if only the requisite number of skilled workers were available. It is a pity more girls do not endeavour to learn the work, as it is of a pleasant nature, healthy, and gives a freer and more independent life for the worker than factory employment; but it takes some time to become proficient, and not a little application, and the present-day girl prefers what seems to her the easier work of the factory.

It would be a desirable thing if a properly-organised school for teaching embroidery (both in design and work) were established in the town: it might be the means of inducing many to learn work which is eminently feminine and of such a nature that to execute it properly, deftness, exactness and strict cleanliness are necessary, and the training and exercise of mind and hand, which these requirements call forth, cannot be otherwise than beneficial to all concerned, and worth some effort to promote. Finally, it is hardly necessary to mention the material comfort secured by means of the money thus earned is by no means the least of benefits.

There are at present about 300 women and girls employed at their homes, and the wages they earn varies, according to the kind of work they execute, from 6s. to 12s. per week, and as there are frequently three and four in a family, each earning their portion, coupled with the earnings of

the male members, the family is able to live in a secure comfort unknown in districts where such home work is not carried on.

Although a great deal is being said and written just now, and many praiseworthy efforts are being made to induce the people of Ireland to patronise Home Industries, yet, strange to relate, here in Balbriggan is a flourishing industry that would not be flourishing were it to depend upon the support of the people of Ireland. It is England, France, America and the Colonies who come with their increasing orders; but here at the very doors, one may say, of the factory are people eagerly purchasing foreign-made hosiery, inferior in quality, and not always lower in price.

It is a strange anomaly, and the Hosiery trade is not the only Irish manufacture that suffers from a like neglect. It is to be hoped that the patriotic efforts now being made to encourage home consumption of home manufactures will result in more practical support than has hitherto been the case.

Boot Making in Ireland.

Anon.

A GLANCE at the map will show the reader the extent to which boot making is carried on in this country, in so far as the factory system is concerned, and it is to that system of manufacture that it is desired to draw attention.

Under the Census of 1901, 16,320 people were employed in connection with the boot and shoe trade in Ireland, but the vast majority of that number were makers in small quantities by hand, repairers, or salesmen. The manufacturing trade as a whole, be it by machine or hand, is not capable of supplying the demand of the home market, as will easily be realised when it is stated that according to the latest returns just issued by the Department of Agriculture and Technical Instruction for Ireland, the importation of boots and shoes for the year 1905 amounted to the enormous sum of £1,786,020. There is, accordingly, much room for activity in this manufacture, more particularly when it is borne in mind that the raw material is available in large quantities, and if, therefore, the manufacture of boots were taken up on a large scale there would be a greater demand for leather, and, consequently, the likelihood of another trade increasing in volume, namely, that of tanning.

Ireland in the past was an exporter of boots and shoes made by hand. Thus, in the Co. Down, at the commencement of the 19th century, large quantities were made for

export to England, and several centres of population in the Counties Limerick and Cork were similarly engaged.

Irishmen who have emigrated to the United States, and who have taken up the boot industry as a livelihood, have risen to eminence therein, and some of the finest factories in America are owned by Irishmen or the descendants thereof.

What has been done in the towns and villages situated in the agricultural districts of Leicestershire and Northamptonshire should be equally feasible in this country. Labour is cheaper and is quick at learning. What can be done in the direction of progress is instanced by the village of Desborough, at one time famous for its hand-woven goods, but which trade was gradually killed by power machinery, as in the case of our hand-made boot industry. It was then that the "thinkers" of the village came together, and the decision that they arrived at converted a population in great straits, numbering 1,000, into a neat and well-organised community of 4,000. This was due to co-operation in moneys and methods. The boot factory, which was one of the organisations decided upon, has over 100 workers, and in 1903, with a capital of less than £5,000, gave a return of three times that amount. Until recently the trade was not a factory one in the proper sense of the term, as with the exception of clicking and the cutting of bottoms, workers, both male and female, were employed in their own homes or small workshops. This system, however, which was in vogue in the district as late as 1904, being considered wasteful both in time and labour, was converted into a factory one, where all parts of the trade can be carried out under the same roof, and to-day there are two factories doing a substantial and growing trade in Desborough. Might not something of a similar nature be carried out in this country? It is not, of course, to be expected that goods of the higher class could be executed, and for a time the importation of such would have to be continued; but surely a beginning might be made with the manufacture of the cheaper classes of boots, which must remain in demand so long as agricultural labour exists in the country.

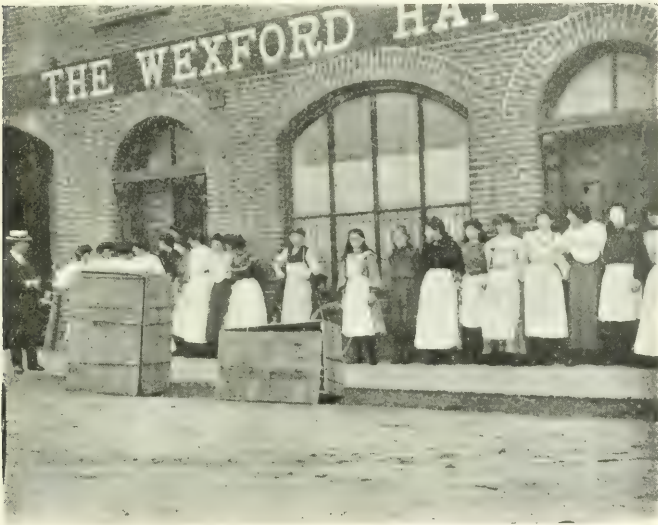
A visit to the village of Ansty, in Leicestershire, will afford still further proof of how a township can be raised up. Founded as late as 1866 it has gradually become a boot-making centre, and whereas in 1891 the population numbered 1,759, in 1901 it had increased to 2,544, and in this township eight factories are now situated, one of which at least is doing a large trade with this country. Surely it should be possible to induce a firm with an established trade of large dimensions in this country to convert what is now an import into a manufacturing business and employ Irish labour.

Straw Hat Making in Wexford.

By M. C.

EVERY Irishman worthy of the name desires to arrest the fatal flow of emigration from his native land, and by keeping the life-blood of the country from ebbing away, to restore some degree of the robust vitality so sadly impaired by the drain of well-nigh a century.

With a view to adding their small mite of contribution to the stock of general effort in this direction, a Committee of



SOME OF THE WORKERS.

Wexford citizens met some five years since to consider how local help might best be rendered, and after mature deliberation the following conclusions were unanimously arrived at :—

1. That the standard of home comfort must be raised, and the incentive to emigration afforded by more favourable conditions abroad be thus, at least, partially removed.
2. That any effort to raise wages to the level prevailing in England or foreign countries would involve grave danger to the few growing and struggling industries we possess, which already suffer from

great disadvantages in the prices of raw material, coal and iron.

3. That the aim should be to make the family and not the individual the unit of population, and by means of joint income to secure increased comfort.
4. That an industry affording employment to women would provide a complement to the established Engineering Works, in the same manner in which shipbuilding and linen manufacture go hand-in-hand in Belfast.

The above conclusions were followed by a resolve to establish a factory for the manufacture of straw and felt hats, and with the willing and generous help of the Department of Agriculture and Technical Instruction (Ireland), in the direction of providing expert instruction, a small company was formed, plant was laid down, and the industry was launched in May, 1903.



AN UNIQUE TRADE MARK.

Many and grave difficulties have confronted the Directors of this small enterprise—difficulties which all pioneers breaking new ground must be prepared to face and conquer, and after four years of strenuous effort the sun of Irish industry, which the Directors

have registered as the trade mark of the Company, seems to be steadily rising above the placid waters of the gentle Slaney.

It rests with Irishmen and Irishwomen to assist this sun to rise to the full zenith of prosperity. In a striking circular issued recently, the Directors say:—"If you help us to keep the girls of Wexford at home, the 'Boys of Wexford' will not emigrate." And, further:—"Remember every time you raise your Wexford Hat to a lady friend that you are helping to keep her sister at home in old Ireland."

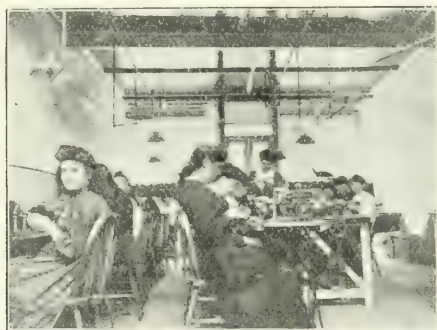
The Wexford Hat Company is at present keeping between 30 and 40 girls at home. The Irish people can easily, by their support, multiply that number tenfold. Patriotism dictates that they should do so.

NOTE BY EDITOR. In the commencement of the 19th Century there was a flourishing Straw Industry in Co. Meath, at Dunboyne, and also at Galtrim. The plait was considered equal to that coming from Dunstable.

Glove Making in Ireland in the Past, and Possibilities for the Future.

By the Editor.

IRELAND was at one time celebrated for its gloves. Indeed, Limerick gloves were considered to be without equal, and found a ready market in all parts of Europe. At the end of the 18th century Lord Clare, in a letter to Paris, informed a friend that he would bring back with him several dozen pairs of the best Limerick gloves. The demand was so great that Limerick alone could not supply the market, and was assisted

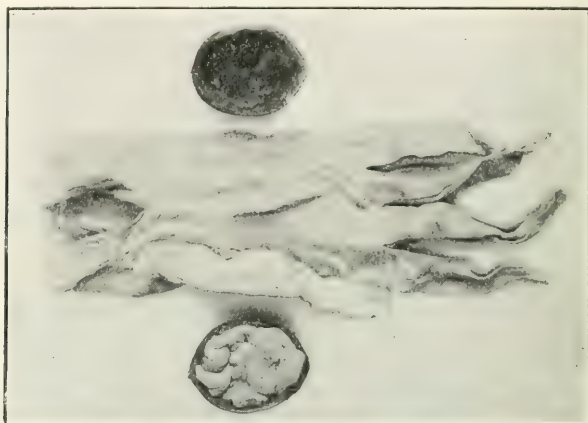


GLOVING SCHOOL, TIPPERARY.

by Cork. The trade gradually declined, owing to foreign competition, and last year there was only one manufacturer of gloves in Ireland, viz., in the City of Cork.

In the month of July, 1906, an Exhibition was held at Limerick (Munster-Connacht), and at that Exhibition there was a demonstration of glove making, as carried on in Worcester by Messrs. Fownes Bros. & Co., and which exhibit was organised by "the Department of Agriculture and Technical Instruction." In the month of October, Lord Barrymore, one of the owners of the town of Tipperary, having offered inducements, Messrs. Fownes Bros. & Co. undertook to start a gloving school as an experiment. Thirty girls are now employed, instruction of learners is supervised by the Department, and the firm in question have decided to extend operations to the male side of labour in the cutting of the skins, and it is hoped that in the near future Irish skins will be used in the manufacture.

The industry is one which not only affords paying employment in the home, but as in the case of lace making and embroidery tends to elevate the workers in their persons and



A PAIR OF LIMERICK GLOVES FITTING INTO A WALNUT SHELL.

surroundings, and many homes are kept busy all the year around in the Southern Counties of England.

It must be borne in mind that the dressing of skins is a trade of itself, and, as is mentioned elsewhere, the majority of the raw material leaves Ireland for treatment in other countries.

Glove Making in England.

By H. URWICK,

Director, Fownes Bros. & Co.

“HELSTONLEIGH (Worcester) abounded with glove manufactories. It is a trade that may be said to be a blessing to the localities where it is carried on, since it is one of the very few employments that furnish to the poor female population easy, clean, and profitable work at their own homes. The evils arising to women who go out to work in factories have been rehearsed over and over again; and the chief evil—we will put others out of sight—is, that it takes the married woman from her home and her family. Her young children drag themselves up in her absence, for worse or for better; alone they must do it, for she has to be away toiling for daily bread. There is no home privacy, no home comfort, no home happiness; the factory is their life, and other interests give

way to it. But with glove making the case is different. While the husbands are abroad at the manufactories pursuing their days' work, the wives and elder daughters are earning money easily and pleasantly at home. The work is clean and profitable: all that is necessary for its accomplishment being common skill as a seamstress."

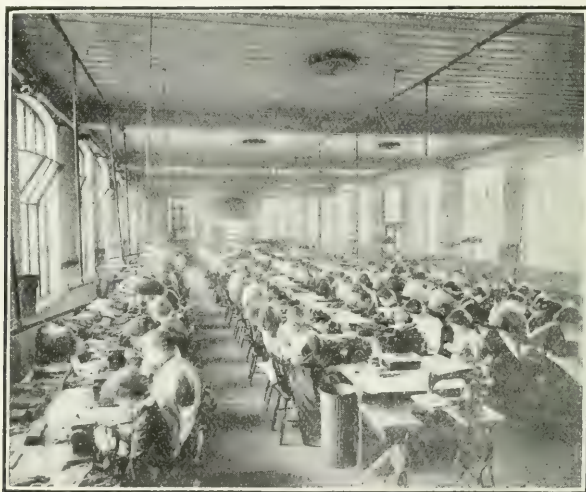
Although these words were written many years ago by Mrs. Henry Wood in her novel, "Mrs. Halliburton's Troubles," they remain substantially true to-day. Changes and improvements have, of course, taken place in glove manufacturing as in everything else, and the sewing machine has, to a large extent, replaced the handwork of Mrs. Wood's



GLOVE MAKING AT HOME.

time; but some processes are still performed by hand, and the introduction of machinery has by no means dethroned the trade from its honourable association with the homes of the people. It is true that the worker of a gloving machine in her own cottage has to provide the motive power herself; and is thereby to some extent handicapped in the competition with her sister who has steam or electric power found for her in a factory; but the rapid improvement in small motors, and the development of the public supply of electric current by local authorities or companies, will probably to a large extent remove this disability of the home worker in the near future. In considering the merits of this kind of work it

is essential to regard it from two standpoints, which are not necessarily supplemental to one another—the economic and the ethical. With reference to the first, while the amounts which can be earned at this work may at the first glance not seem large, when contrasted with what could be obtained by the girls themselves at any other employment, or by the men of their families working under similar conditions, the sum assumes a very different aspect. It must not be forgotten that the work can be, and is frequently done in villages and country districts, and the earnings must, therefore, be compared with the low rates of wages ruling in agricultural employment. An industrious girl working at



A SEWING ROOM IN MESSRS. FOWNES BROS. & CO.'S FACTORY
AT WORCESTER.

This firm have inaugurated Gloving in Tipperary.

home can, and often does, earn as much money as her father when he is employed as an agricultural labourer. Instances can be quoted where several members of the family working at this trade bring into the weekly budget the substantial sum of 26s., and this not during an exceptional period, but on an average extending over several months. When these figures, which are facts, not theories, are considered in relation to the well-known earnings in the country, the effect upon the comfort of the life produced by this addition to the family exchequer can easily be imagined. It is clear, however, that the most important results of any kind of environment

can never be set down in terms of cash, and that the economic position of workers may be vastly improved without any real uplifting of their condition in the highest and best sense. To estimate the true value of this work we must, therefore; glance at its effect upon the habits and characters of those engaged in it. It is obviously a kind of labour which must tend in the direction of increased self-respect. It is not only a light and pleasant employment, which the most cultured woman need not scorn to engage in, but involves scrupulous cleanliness and tidiness on the part of the worker if good results are to be obtained. Habits of methodical care must also be cultivated by any one who wishes to excel.

Unlike many industries of the day, which are so subdivided as to take away all interest from them, the results of good work in which pride can be taken are in glove sewing apparent. For this reason the artistic faculty in the workers, not in the direction of creation, but in that of joy at the production of a shapely and beautiful article is of great value. It is probably on account of the higher development of this power that the Italians and French surpass the English in the production of those kinds of gloves, in which delicacy of finish and beauty of appearance are of chief importance. This fact makes the attempt to re-introduce glove making into Ireland so particularly interesting and hopeful, because the Celt is undoubtedly far more of an artist than the Saxon, and should, therefore, excel in the same direction as the Continental worker.

In days of old the artistic opportunities in glove making were even greater than they are now, as is shown by the accompanying illustrations of two Royal gloves; and in speaking of those of Elizabethan times, that most artistic of rogues, Autolycus, who surely had much of the Irishman in his composition, was quite justified in singing: "Gloves as sweet as damask roses." Even in these more prosaic days, however, a really daintily turned-out lady's glove is still a work of art, in which the producer can take a just and legitimate pride. Gloving as a Home Industry is by no means remotely connected with the everlasting problem of the housing of the people. Everyone who has studied that question knows that the solution lies quite as much in teaching the people to keep their houses decently as in providing good dwellings for them. No manufacturer would allow his gloves to go into dirty and ill-kept cottages, and, therefore, the people must learn to live respectably before they can expect to have the work given to them. But there remains what is by far the most important function of this and other home industries. At a moment when all the exterior forces,

economic, educational, philanthropic and legislative seem to be combining to disintegrate the home and break up that family life, which hitherto has been the unit on which the whole social structure has been built. Here we find a power working in the opposite, and what every thinker must agree to be, the right direction. In every gloving district in England it would be easy to point to scores of homes which, but for this work, would have been broken up, or at least depleted of some members of the family, who would be forced, in order to live, to join the wild rush to the towns, which is



ROYAL GLOVES (Elizabethan).

productive of so much misery. The natural affection of members of a family for one another is apt by separation to be dissipated and frittered away ; whereas in the glove centres it is often fostered and translated into the self-sacrifice exemplified by more than a fair contribution to the common stock. It is a frequent experience in these places to find parents kept from the workhouse by the earnings of their children, and the younger members of the family brought up better than they could have been if it were not for the addition to the family income made by their elder sisters.

If the spread of these home industries is of value to England, how much greater would be the advantage to

Ireland, where the existing employment is in such a large proportion agricultural, and where the country is being denuded of much of its best young blood, not by migration to the towns, but by emigration to distant lands.

This attempt to show the effect of home-gloving upon the lives of those who undertake it must only be regarded as an effort to explain the reasons for a fact which rests for its proof on the firm basis of the evidence of those who have carefully watched the results of the introduction of the work into a fresh district, and are prepared to testify to the improvement in tone of the whole neighbourhood in the course of a few years. It has been suggested that material and moral progress do not necessarily go hand-in-hand; but that they do in this case often impinge on one another is shown by the experience of a manageress of a sewing station, who had herself risen from the ranks of the workers. She says: "I find the more some of the girls earn, the more they think and wish to improve themselves in all ways."

It may be hoped that enough has been said to convince some who may chance to read that anyone who has the welfare of Ireland truly at heart might do worse than follow the example of those who are sparing no effort to help and encourage, by all the means in their power, the introduction into the country of gloving and other Home Industries.*

Glove Making in France.

*Specially secured for the Home Industries Section by
MONSIEUR LEFEUVRE MEAULLE, Consul for
France in Ireland.*

At Grenoble, the principal seat of the industry, apprenticeship is almost entirely amongst the cutters, but the majority of apprentices are to be found in the country districts. The length of the apprenticeship is a year and a half. The apprentice pays from £10 (250f.) to £12 (300f.) to learn his trade.

He learns how to smooth the skin and to remove the flesh which the skinner has left. This work is done on a table or marble slab, on which the skin, which has already been soaked, is placed.

The apprentices have to cut up the prepared skin, in order to obtain the different pieces of which the glove consists.

The monthly salary of the cutter on the permanent staff is about £8 (200f.); and one can calculate it at about from £80 (2,000f.) to £96 (2,400f.) per annum.

*NOTE BY EDITOR.—The demand for Irish-made gloves exceeds greatly the present possible supply.

But the greater number of workers in the large factories earn about £4 16s. per month.

According to a calculation made on the wages of a hundred workers, the average daily earning of the cutter is 2s. 6d. (3f.33).

The wages of the stitchers come to about 6s. 4d. (8f.) or 7s. 2d. (9f.) per week ; that of the forewomen to about 48s. (60f.) or 72s. (90f.) per month.

Power machinery is but little used in the making of gloves except for the smoothing process in the mill, and for the different kinds of stitching.

The raw materials come from all parts of the world ; but the French kid, which is most highly esteemed, is principally made up into gloves for exportation. Only a small proportion of the lamb-skin used is obtained in France ; it is from South America chiefly that kid is imported. Lamb-skins come from Texas, Mexico, Peru, Chili, Argentine Republic, Algeria, Tunis, and from the Ural Mountains.

The glove factories are worked on much the same plan as in the other French centres, of which the most important are St. Junien (Haute-Vienne), Niort (Deux-Sevres), Millau (Aveyron).

At St. Junien the cutters earn on an average 2s. 7d. (3f.25) per day of ten hours. At Niort, 3s. 7d. (4f.50). At Millau, 3s. 2d. (4f.) to 4s. (5f.). At Millau the stitchers earn 2s. (2f.50), the embroiderers 1s. 7d. (2f.) to 2s. 4d. (3f.) per day.

At the various centres of the glove industry in Paris the skins are received from the leather dressers. They are then sorted and handed over to the dyers. The dyed skins are given to the cutters, either in the workshops or in their homes. Then the gloves are punched, embroidered, and finally sewn up by the female workers.

In Grenoble, Millau, Chaumont, St. Junien, Niort and Paris they cut the gloves, which are afterwards stitched and embroidered in the districts of Isere, Aveyron, Haute-Marne, Marne, Haute-Vienne, Vosges, Meurthe-et-Moselle, Orne, Oise, Loir-et-Cher, Ile-et-Vilaine.

The apprenticeship for the glover lasts about two years, and is arranged by the glover without any interference on the part of the master. This apprenticeship is generally gratuitous, as the glover finds that he is repaid for the time spent in teaching the apprentice by the work produced by the latter in the second year of his apprenticeship.

All workers (male and female) are paid by the piece.

Male workers in Paris earn from 5s. 2d. (6f.50) to 7s. 9d. (9f.75) per day (length of day, about nine hours) ; female

workers (unusual) in Paris, 2s. 7d. (3f.25) to 3s. 4d. (4f.25) per day (length of working day, about nine hours).

Glovers in the Provinces working for Paris, from 1s. 9d. (2f.25) to 2s. 6d. (3f.25) per day.

The raw material comes from France, Italy, Spain, South America, and generally from the countries bordering on the Mediterranean. No machinery is used except sewing machines for embroidering, etc., and these to but a small extent.

The Utilisation of Leather, Skin, Fur, Hair and Horn.

Anon.

At the Cork Exhibition in 1902, and in Limerick at the Munster-Connacht Exhibition in 1906 a case was displayed containing raw materials available from one source, namely—the beast, which, when the quantity available is taken into consideration, are greatly neglected in this country.

In the International Exhibition of to-day another display, with the addition of the sheep, the goat and the rabbit is made, the object being, I understand, in all cases to draw attention to what must be looked upon as a wrong condition of affairs, and, if possible, to bring about a change in the methods. There are on exhibition 15 different kinds of sheep leather, and which are used in the manufacture of account books, purse linings, photo frames, pocket books, hand bags, boot uppers, boot linings, upholstery, gloves and hat linings.

Practically all our requirements are imported, but there is some hope for a change, as a start has been made with the revival of the gloving industry, and I am told that the establishment of a tooth brush and shaving brush factory is under consideration. The machinery for the concentration of the raw material is already available, as in order to have an export trade (which exists) there must be systematic collection. The export of these raw materials amounted in 1905 to the value of £518,591.

This return does not include bone, and presumably, therefore, the bone which might be used in the manufacture of tooth brushes and nail brushes is utilised for bone manure.

There is a ready demand for Irish kid skins when properly “flayed,” and these go to England, France, and Belgium; the principal sources of supply being the Counties Limerick, Tipperary, Cork, Kerry, Clare, Cavan, Monaghan, and Roscommon. Few people seem to realise that besides the kid; the seal, the otter, the rabbit, the pony and the lamb are also

HORN



Produces

Combs Buttons. Spoons.
Forks Cups.
Knife & Razor Handles
Pipe Mouthpieces. Glue

Produces

LEG BONE



Buttons, Studs, Tooth, Shaving & Nail Brushes.
Knife Fork & Razor Handles
Paper Knives. Chessmen. Draughts.



Produces

HIDE.

Produces

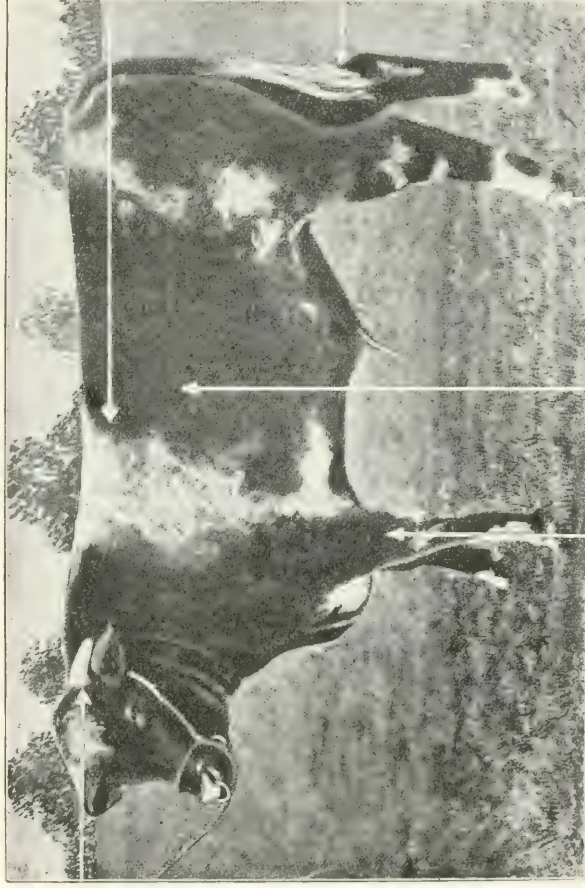
LEATHER.

Produces

Buttons, Toothcombs. Glue

HOOF.

Produces



BODY HAIR.

Produces

Felting for Upholstery
and Shoes

TAIL HAIR.

Produces

Curled Hair
for Upholstery.

1906

Cattle in Ireland

4.638.924

Boots. Laces. Saddlery. Belting. Portmanteaus. Bags. Purses. Pocketcases. Footballs. Hurley Balls. Cricket Balls.

used in the manufacture of gloves, the demand being all the greater since motoring became a pastime.

Could not this organised collection be turned to a proper account by the country itself? Could not a central dépôt for various materials be established—a National dépôt in fact, and various materials distributed to centres for manufacture? An Irishman well versed in the hide and skin trade and its allied branches informed the writer that, in his opinion, there was no more difficulty in securing such raw material as was available in the country for home manufactures than in placing it with manufacturers on the other side of the Channel. I wish to point out, however, that, although we have raw material on the spot, certain articles which could be manufactured in small factories and workshops, can only be made from raw materials obtainable from South America and elsewhere; the market for such is London and Liverpool.

Several of our towns are now turning their attention to electric lighting; but while lighting the path for home they should, as other countries are doing, light the path to industry in those homes. In other words: Buttons, tooth brushes, shaving brushes, pipe mouthpieces could be executed by the male worker, and purses, portfolios and boot uppers by the female workers, with lathe, saw, drill and sewing machine, respectively, driven by power.

Under the Labourers Cottage Act, 1906, it is possible to erect dwellings for artizans, and I would ask, is it not worth the while, when considering this question, to consider also the question of supply of power to these houses, in such centres as are suitable and might be selected for the carrying-on of the trades aforementioned?

Employment means a reduction of poverty, and, therefore, a reduction of rates. Further, it means the rehabilitation of small towns at present languishing; and finally, it means a stay on emigration, by keeping the flower of the Nation in their own country with a plentiful occupation.

NOTE BY EDITOR.—At one time felt hat making was a thriving industry in Ireland, the principal seat of the manufacture being Dublin, and there was also a factory in Athlone, and in Kilkenny. Felt hats, be they the hard ones, the "Homburg," or the "Tyrolean," are all manufactured from the fur of the rabbit. The pulling of the fur from the skin is a special industry, and girls earn from 7s. to 10s. per week thereat.

Tooth Brush Making.

By ROBERT ADDIS, *Junior*.

THE industry of Tooth Brush Making dates back to the year 1780, when a leather tanner named "Addis" commenced collecting the bone and tail hair of oxen from the butchers, and making the same into tooth brushes.

From this small beginning an industry has grown, employing some thousands of work people in different parts of the world, and producing an article in almost universal use. Although a tooth brush can be purchased for a small sum, there is a great amount of work and time spent in its manufacture.



SAWING THE BONE.

Bones vary in size and quality considerably, some only making four common, whilst others will make five best and one common handle. The value of the handles depends on the freedom from pores of the bone, its strength to hold the bristle, and

its shape. The plainer the pattern the greater the value usually, most fancy patterns being made from ugly or damaged pieces to hide imperfections in the bone. The commercial value of finished handles is 6s. to 25s. per gross. First of all the marrow bones that have been collected from the butcher have to be cleaned and the fat removed. They are then sent to the factory



FASHIONING THE HANDLE.



SMOOTHING AND POLISHING THE HANDLE.

and cut into five strips by a circular saw, each strip making one handle. The strips are then planed with a hand plane, shaped on a machine, then hand-fashioned; the latter process taking from 4 to 5 minutes for each handle. Then the remaining fat and animal matter is removed from the handles, to do which two chemical processes are used, which leave them beautifully white and prevents the bone becoming offensive when wet. Some foreign makers omit this, merely laying the handles in the sun to whiten.

The next process is to smooth them. This is done by putting about 2,000 in a large barrel, together with polishing paste and water. The barrel is then revolved for two days, the handles rolling over and over each other. This makes a smooth and natural surface in a similar way to pebbles on the sea beach.

One of the most important and interesting processes is drilling the holes for the bristles, and although made one at a time, it is surprising the speed with which this is done. The machines for this being most ingenious, they will drill almost any shaped handle with any number of holes and rows that may be required. The backs are then opened by fine saw cuts (Graves), to enable the wire to be put through to draw the bristles in (these are the four red lines which many people think are only put for ornament).

The next process is to draw the bristles in. This is done by putting a loop of wire through the hole, threading a certain



CUTTING THE BRISTLES.

The operator is Mr. Robert Addis, direct descendant of the first maker of tooth brushes.



DRAWING THE BRISTLES.



DRILLING, TRIMMING, AND POLISHING.

quantity of bristles half way through the loop, then pulling the wire back tightly and doubling the bristle into the hole. This is entirely done by hand, and takes from 10 to 15 minutes for each brush, requiring most skilful work, as if there be even one or two bristles too many it would cause the brush to split, and if too few, the bristles work out.

Although the brush would now seem complete it still takes some time to finish, as there are many minor processes, such as filling the wire graves with wax, polishing, washing

and sterilizing, trimming the bristles to required pattern, stamping with customer's name, numbering, boxing, etc., before it can leave the factory to commence its sphere of usefulness.

Artificial teeth have given a great impetus to this industry, as they must be cleaned often to be comfortable, there being several special designs for this purpose.

The wages are almost all paid by the piece, so differ considerably. The man



WAXING, SCRAPING, AND WASHING.

who cuts the bone gets 4d. per 20 bones, and if he has plenty to do would earn 10s. per day; where paid by the week £2 is the usual wage. 'The fashioners' are paid from 5s. 9d. per gross for child's size up to 10s. 9d. per gross for heavy ones; they earn from 27s. up to £2 per week, according to capabilities and hours worked, many only working about 30 hours per week. The 'drawing' is usually done in the workers' own homes, and in most cases by married women in their spare time.



SORTING AND GRADING.



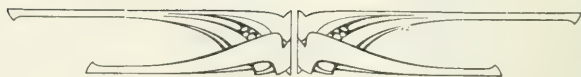
FINISHING AND PACKING.

They will earn from 5s. to 7s. 6d. per week, while those working full time will earn about 15s. per week. The girls on "finishing" start at about 4s., and work up to 10s. and 15s. per week.

It is almost universally acknowledged that a tooth brush is a necessity, and H.M.'s Government purchase about one hundred thousand annually for the Army, and many schools and institutions supply the inmates with one.

The firm of Messrs. Robert Addis and Son, of London Fields, who are showing in the Home Industries Section the manufacture of tooth brushes, are the descendants of the original Addis aforementioned, and the business thus started in 1780 has been successfully continued by the family of Addis from that time.

NOTE BY THE EDITOR.—It is estimated by an expert that to equip a factory with all the latest plant and power (suction gas) and give employment to 30 hands therein, with a similar number working in their homes putting in the bristles, would entail a capital of £2,500, £1,500 being required for plant, and £1,000 floating capital.



Comb Making in France.

*Specially secured for the Home Industries Section by
MONSIEUR LEFEUVRE MEAULLE, Consul for
France in Ireland.*

HAIR combs are made of horn, tortoise-shell, celluloid, or of a composition closely resembling the latter.

Horn and tortoise-shell, which were formerly very much used, have lately been largely replaced by celluloid—a chemical composition, somewhat dangerous to manipulate.

The manufacture of horn combs has existed for a long time in France, but the consumption only equals about one-fifth of the production.

The industry is organised as follows in most of the workshops of the present day:—First, the unpolished bone is bought and prepared by the buyer for the manufacture of combs. He removes the waste matter, *i.e.*, flesh, fat, and the ends which cannot be used in this manufacture. To the plate maker he sells the pieces of horn of various lengths, which are used for making the comb, and are ornamented in various ways.

Certain manufacturers united to reduce the power of these buyers who had the control of the markets, while the manufacturers had not sufficient power to buy the raw material in large quantities.

But, with few exceptions, the owners of the factories still obtain from these first buyers rectangular pieces of horn, which are handed over to the workers to be cut up and shaped. These men generally work with the help of their wives and children, in the workshops in which motor power of some kind is to be had.

Usually the owner of the machine is not a comb manufacturer; he only hires out his machinery. The workers prefer this plan, which gives them a certain amount of independence as compared with the factories, where they are under restraint, and obliged to be at work for a certain number of hours each day. The worker in the factory earns about 4s. 9d. (6f.) per day—£6 (150f.) per month. This is the usual pay of the worker in a comb factory. The women earn about £4 (100f.) per month.

Ten hours is the usual limit of the working day. Those who work with hired motor power in the workshops earn more than £6 (150f.) per month; but the work is very uncertain, depending on their skill, and especially on the demand for the finished article. Very often the earnings



FASHIONING BY HAND.

for one month are more than £12 (300f.), but from this must be deducted the keeping in repair of certain mechanical tools necessary for the work (of which the price to begin with is about £20 (500f.)). These tools are for cutting, polishing, etc. Then the rent must be considered, and the hiring of the motor power : about £4 (100f.) per annum for the hire of a machine (that is to say, the power produced by a machine). In reality this is only £2 (50f.) per annum for each worker, as



POLISHING.

two usually work at the same machine, each making use of one tool.

The length of the working day is not limited, work being done at home.

The apprenticeship, which lasts for eighteen months, has become much easier since celluloid has come into use. One learns how to work in this material in a few months, three at the most. The workers (chiefly female) earn from 2s. 4d.

(3f.) to 3s. 2d. (4f.) per day working in celluloid. This work is carried on as much at home as in the factories; but at home it is much more dangerous, as more care and greater precautions are taken in the factories.

The motor power is supplied either by a water-wheel or by a steam engine.

The raw material (horn) comes from Siam, China, Australia. and South America.*

The Manufacture of Cutlery in Ireland.

By the Editor.

UNTIL the month of June of this year the cutlery trade in Ireland was practically non-existent, although the original house of the doyens of cutlery manufacture in Ireland in the past is still in existence, namely, Messrs. Read & Co., in Parliament Street, Dublin, the manufacturers of the celebrated + Read razor. This firm was founded in the year 1670, but although still in existence has ceased to manufacture, and it is interesting to know that while the trade was being actively carried on goods were being sent to Sheffield, from whence Ireland is now receiving a large proportion of its supplies. In 1838 Dublin boasted of 18 manufacturers, and the class of goods they manufactured is to be seen in the show case in the Home Industries Section. Messrs. Read exhibit goods manufactured 100 years ago, which are equal to any goods turned out in the present day. Mr. Thompson has contributed a collection of goods imported and some specimens of knives lately executed in the new factory which has been established this year in Dublin. There is no reason why, in the opinion of an expert cutler, this trade with proper support, should not again flourish in Ireland. In his opinion ware can be produced at a figure which will facilitate competition with several places, and since a re-commencement was made most satisfactory support has been received from several of the best houses in the country.

The originators of the revival hail, one from Dublin and the other from Sheffield, and they decided to start manufacture

*NOTE BY EDITOR.—The combings of the horn and the dust produced by the saws is highly valued by market gardeners for tomato growing and fetch a high price.

Plant for the manufacture of combs, and capable of giving employment to 30 men, and 10 women, would cost, approximately, a sum of £200. Such plant would require 6 h.p., and the possible output would be 100 dozen per day.

on the most up-to-date lines, and it is hoped to eventually transfer a manufacturing business from England to Dublin, as the market has already been secured. The work being piece-work and the goods all of a high quality, a cutler, when proficient, will be able to earn 35s. to 50s. a week; and while it must of necessity be an industry controlled from a factory, there is no reason why, if power be obtainable in the home, that a number of extra workers should not be taken on.

In Germany this industry is carried on principally in the Rhine Province, in Saxony and in Berlin. It affords employment for over 28,000 hands, and which includes home work in 1,000 houses. In Sheffield cutlery is largely made in small workshops supplied with wheel power. In France it is to be found in the Haute Marne as an alternative to agriculture, and in the villages round Nogent thousands of hands are employed in the highest grades of material. At Thiers the cheaper classes of goods are made in small workshops supplied with motor power from the Durolle river, or by means of gas motors. According to a report issued by the Belgian Ministry of Commerce at Gembloux, the industry is a thriving one. Formerly the workers equipped their shops with every implement for the manufacture, and were supplied with the necessary raw material by an employer. This was done to ensure the use of good metal only. All the cutlers are home workers, and they turn out their specialities from start to finish themselves. One set will make table-knives, another penknives, and another files. They are initiated into the methods ruling when children, and their daily attendance in the father's workshop makes them conversant with the various tools and processes. They learn the tricks of the trade unconsciously and without effort. The first work allocated to the apprentice is the adjustment of parts, next he is allowed to do the sharpening and polishing, and if at the end of five years he has shown proper application, he can call himself a master cutler.

The pay is very small, commencing at 25 centimes per diem and reaching 1 fr. 50 centimes per diem at the end of five years, and the most skilled workers can earn fr. 2.50 per diem.

Germany, France and Belgium, Sweden and America are all sending their goods into this country, and it is hoped that the revival mentioned herein will, while reducing the importation, lead us to adopt methods which have largely gone to build up the cutlery trade in other countries.

Goods Imported into Ireland which might afford Paying Employment in Homes and Small Factories.

Anon.

"THE Report on the Trade in Imports and Exports at Irish Ports," issued by the Department of Agriculture and Technical Instruction for Ireland, 1907, is of great interest to those seeking for the development of industries in this country. It has been deemed desirable to extract from that Report particulars of certain articles imported in quantity, and of certain raw materials exported, which could be manufactured in small factories, workshops, or homes in Ireland. It is admitted that labour is plentiful, cheap, and quick at learning; and nobody examining the staple commodities produced, be they linen, embroidery, lace, woollen goods, etc., can gain any the fact, that where labour is properly organised the output is equal to, and often superior to, similar goods produced elsewhere.

Emigration can only be reduced by affording permanent and paying employment. Raw material is available in many districts in quantity, and only awaits proper concentration, and the manufactured articles specified are, as figures show, in large demand for home consumption.

Manufacturers in England and Scotland, with a made market in Ireland, might benefit themselves and the country by opening branch factories on a small scale to meet Irish requirements, as Messrs. Fownes Bros. & Co. have done in Tipperary; and here it is interesting to draw a comparison between the average agricultural wages ruling in the Three Kingdoms in 1902. At that period Ireland's maximum average in a county was 13s. in the immediate neighbourhood of Belfast, England's minimum average was 14s. 6d. (Oxfordshire), Scotland's minimum average was 13s. 7d. (Caithness), and Wales' minimum average was 15s. 8d. (Cardigan), whereas Ireland's minimum was 8s. 9d. (Co. Mayo). Thus Ireland's maximum average was less than the minimum average in the other three countries, and her average for the 32 counties was 10s. 7d. These figures may have slightly altered since, but the contrast must remain.

IRELAND IN 1905 IMPORTED :—

Baskets to the value of ..	..	£15,684
Blankets " " "	..	36,993
Woollen Goods " "	..	883,370

(The value of woollen goods exported was £355,150, and the value of raw wool sent out of the country was £550,814).

Boots to the value of	£1,786,020
Saddlery	37,072
Belting	10,528

were imported.

(The value of boots exported was £45,629).

Leather was imported valued at £450,870, as against an export of £90,704, and hides and skins valued at £507,377 were sent out of the country to be manufactured elsewhere.

Brush goods valued at £58,064 were imported, as against an export of £2,947.

Hosiery valued at £161,559 came in, as against a value of £38,458 going out.

Earthenware and china, a large proportion of which could be manufactured here, is represented by an import valued at £89,754 per annum.

Nearly all requirements in felt hats, gloves, combs, tooth and shaving brushes, artificial flowers, feather goods and *passementerie* are supplied by other countries, and raw material for such exist in Ireland, and in the case of gloves, goes to Belgium and Germany for manufacture; and feathers to the value of £53,988 were exported in the year named.

The foregoing will give some ideas as to possibilities. The compilation referred to should be studied as a whole, and is obtainable through any bookseller.

Scheme for an Irish Co-operative Pottery Works.

By W. P. RIX, Ceramic Specialist.

THE scheme here shown is of the smallest type possible, and is intended to employ from 20 to 30 workers, the number being increased in proportion to the amount of decoration added to the ware.

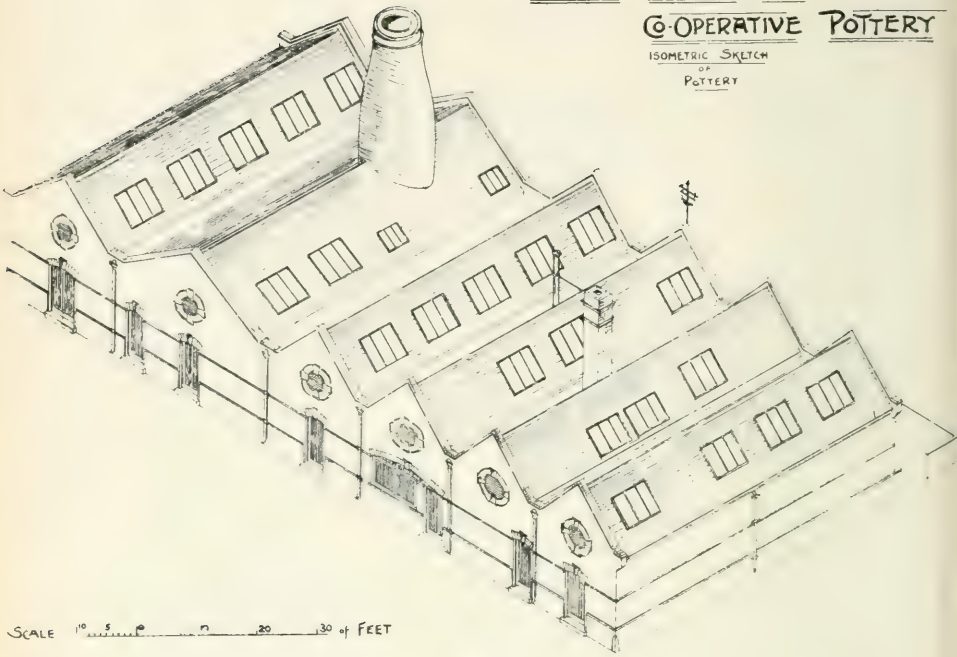
If ware of ordinary Rockingham and Samian type be produced, one oven is sufficient. Better class wares would require two ovens; the plan of factory being slightly altered and extended by placing the second oven behind the first, and enlarging the dipping room.

The Cottage workrooms show the smallest dimensions convenient for work. An increase to 15 × 20 feet would be desirable if much decorating is carried on.

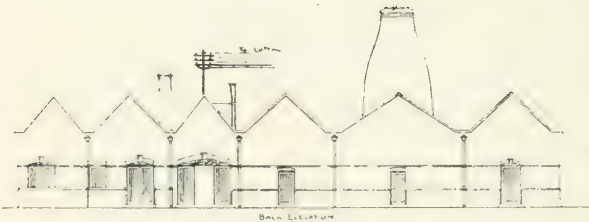
SKETCH DESIGN FOR A

CO-OPERATIVE POTTERY

ISOMETRIC SKETCH
OF
POTTERY



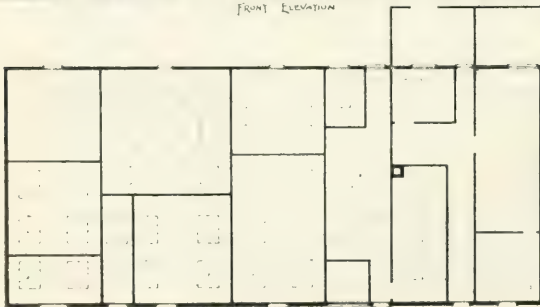
SCALE 1" = 5' 0" 10' 20' 30' of FEET



SIDE ELEVATION



FRONT ELEVATION



PLAN

ROAD

OUTSIDE
ELEVATION

In the event of decorating on biscuit or glazed ware, the goods would be returned to the Cottage workshop for this purpose, and again brought to the ovens for re-firing.

Provision is shown for conducting electric power from factory to workshops to drive wheel and lathe, if desired.

The Plan of the Cottages can be simplified, and the dwelling accommodation reduced if desired.

The Cottages on the opposite side of the road from the works are intended to have lean-to with skylight in the workshop for the purpose of securing top light for the workers.

The Cottages adjacent to the works are intended for the unskilled labourers and sagger makers, who will necessarily be occupied in the factory itself, and in this case the lean-to portions may, therefore, be omitted.

It is proposed that the ware shall be carried upon boards from the Cottages to the works for drying and firing, as the risk of carrying by traction is found to be too great.

If necessary the clay and coal can be delivered to the factory upon a tram line, but the quantity required would hardly warrant this outlay.

A small space has been enclosed round the Cottages for garden accommodation, but it is possible that this space may be considered more than necessary, in view of the fact that the workers will be occupied otherwise during most of their time.

For the present arrangement of the works, it is probable that five Cottages would be sufficient to supply enough ware for one kiln. This, however, would depend upon whether any of the cottagers were occupied on the despatch and selling of the goods when finished.

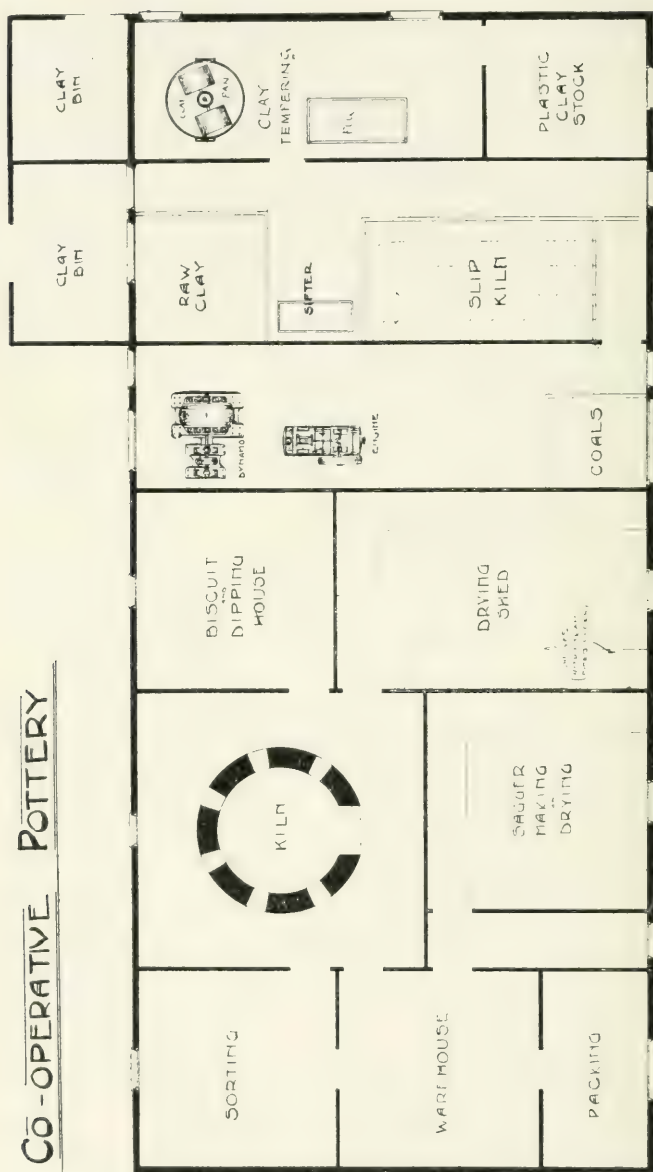
The preparation of the clay is arranged to be accomplished by means of an oscillating sifter, into which the raw clay is fed with water, and thus brought into the liquid state, being run from sifter into a brick tank heated beneath with fire-flues, or by steam, as preferred.

When sufficiently stiffened by this means, it is fed into a pug mill, where it is tempered for use and transferred to the plastic clay stores, where it can be kept in proper condition until required.

An alternative arrangement can be substituted, if desired, by replacing the fire-brick tank or slip kiln with the usual form of clay press driven by steam power.

The Wet Pan of the mortar mill type has been adopted for preparing the sagger clay, and this has been placed as near as possible to the steam engine to avoid loss of power; the clay being wheeled to the sagger-making shed when required.

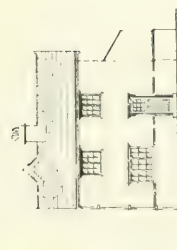
Co-operative Pottery



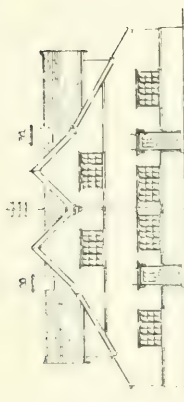
SCALE 0 10 20 30 FEET

GROUND PLAN.

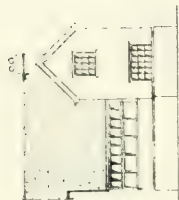
Scale 1" = 10' 0" FEET



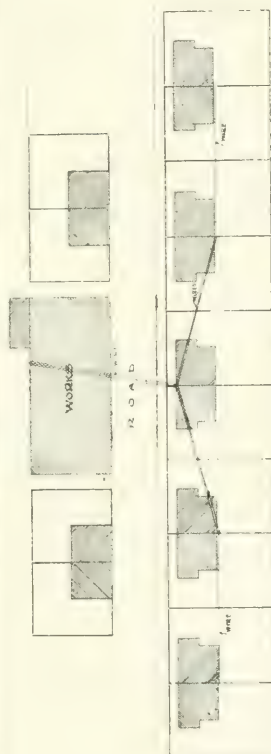
HALF BACK ELEVATION



FRONT ELEVATION



SIDE ELEVATION



Scale 1" = 10' 0" FEET

BLOCK PLAN
MODEL POTTERS' COTTAGES

As far as possible the traffic has been concentrated in the roadway contiguous to the Cottages on the front side of the works; but it has been assumed that access can be obtained on the back side of the works if required.

A complete equipment for the manufacture of pottery by hand power is exhibited in the Home Industries Section by Messrs. Gosling & Gatensbury.

NOTE BY EDITOR.—There is also a case containing specimens of ware at present imported into this country to the extent of £80,000.

The case has been divided into four sections, representing the four Provinces of this country. The articles thus displayed are, so far as the raw material is concerned, capable of being manufactured in the Province under which they are exhibited.

It stands to reason that if Ireland possesses, as she does, both raw material and labour waiting employment, a means should be possible for the development of this industry.

The manufacture of such ware as is shown is only executed in small quantities in comparison with the home demand. A co-operative scheme, therefore, such as is put forward, is worthy of consideration, and to those interested in the subject attention may be drawn to a statement lately made regarding a clay in the South of Ireland by a large pottery firm in Staffordshire, viz. :—"We made a large quantity of china from the clay, which came to us with all its impurities. It was washed and the mica taken from it, and used without any of the careful processes to which our English clays are subjected. Taking this fact into account, the results are surprisingly good. We see no reason why clay works should not be erected in Ireland, as we are confident that the clay is of considerable value. Of course, in its crude state it is of no use to potters, but preferred as the Cornish clay is, it would be of excellent quality."

Finally, it is interesting to note that the great potter, Josiah Wedgewood, in giving evidence before the House of Commons, stated that the English potters procured their clay from Devon, Dorset, Cornwall and the Irish Coast. Pottery and porcelain clays were exported to the Continent from the West of Ireland.

The Arts and Crafts Society of Ireland.

By *COUNT PLUNKETT, V.P., R.I.A. ; V.P., R.S.A.I.*

THE recent return towards handicrafts throughout Europe has naturally shown differences in their characteristics, according with National distinctions. In England the movement is largely the outcome of admiration for 17th and 18th Century work. It is to be regretted that Ireland, which produced such good work during the same period, has not yet developed a new style.

The influence of the London Exhibition of 1851 was bound to bear hardly on Ireland. The wave of utilitarianism should spare something in a settled country like England, with a commercial history unbroken for centuries. In Ireland it threatened to sweep away the last remnant of the domestic arts. The skill and honesty of our craftsmen remained; but they began to imitate perverse models. When the era of cheap bad taste set in, they were out of the competition, for many of our artistic trades came to grief. The re-action from vulgarity in England, like the Romantic movement in literature, was in its beginnings so artificial that it naturally failed to convince the "practical man"; hence all reforms in design were, for a time, usually accounted ridiculous. It seemed, too, a child-like self-denial, if not a heresy against progress, in an age when the cry was always "sell, sell," for the craftsman to aim at returning to the position of an artist. To their joy, the machine, the public would add the man-machine. From this source comes the perverse admiration still expended on the exact reduplication of parts in a design, on the completion of line, on smoothness of finish. Hence, too, the vulgar liking for flamboyant patterns, and the spoiling of distinction by incongruous or overloaded detail. Still must we pay extra for simplicity, because the majority that rules the market wants "value for its money." There are, however, signs of change in the public fancy, and the feeling for artistic qualities, which was dormant, is being awakened by our increasing familiarity with the good work of the past.

This reform was still at its commencement when Lord Mayo formed the happy thought of founding the Arts and Crafts Society of Ireland. He drew around him a little group of artists and art-lovers, and better still, he found a small body of craftsmen waiting for his action. Recognising that the movement needed explanation, the Society arranged a scheme of lectures dealing with the applied arts. Soon after-

wards, the Society organised, on a large scale, one of the most notable exhibitions of Arts and Crafts ever held in Ireland.

I may here summarise the aims of the Society. Its main purpose is to associate art with life—to make the exercise of a handicraft even more a mental than a physical effort. Our surroundings have become out of harmony with refined thought; and the sense of beauty, common to rich and poor, is being deadened in both. Skill, imagination, grace, fitness, put below the conveniences of commerce, should be restored to their rightful pre-eminence. The individual worker, producing results that machinery cannot touch, should have the opportunity of proving his gifts, for those who would value them. He should be given the guidance and encouragement he needed. Further, he should be helped to a market for his wares. What former generations of our craftsmen did, their descendants could do. It were surely also a good thing to make the daily task less sordid—to develop in the artisan a feeling for his work, and to bind employer and employed in a whole-hearted unity of interest.

The means used by the Arts and Crafts Society to carry out its purpose deserve to be mentioned. The President, who was always the moving spirit of the Society, and the Committee of Selection, personally visited the workshops of Dublin, consulted with employers and their workers regarding the improvement of design, and suggested the character of work desired.

The Committee laid stress on the need for sound craftsmanship and individuality in the work, and they insisted on the right of the workman to have the credit of his invention. To clear his judgment they brought together fine examples of Irish work, old and new, and, in a separate section, they showed what the English craftsman was doing. From the Arts and Crafts Exhibitions all merely mechanical work has been excluded. By arrangement with the heads of firms and of schools those object-lessons were practically made available to craftsmen and pupils of the trades of Dublin. At these largely-attended gatherings addresses were delivered, followed by Reports, in which the merits, and weaknesses, of the work shown were dealt with in a very candid spirit.

The Retrospective Sections of the first and later Exhibitions of the Society were of much value and importance, opening forgotten chapters in the history of Irish craftsmanship, and suggesting possibilities in the revival of old trades.

Though Ireland is a comparatively poor country, it is amazing to see the amount of money that our people spend annually on other purposes than those of necessity. For Church purposes alone enough is spent to make a multitude



A CORNER OF ARTS AND CRAFTS SUB-SECTION.

of workers live and thrive. Until lately this demand, outside the matter of building, passed mainly to a foreign market. Some of the work done in Ireland, such as Church embroidery, suffered from the ignorance of design among the workers. Now this condition of affairs is considerably changed. A

good deal of decorative stone-carving is done in Ireland ; so is it also with the stained glass, not to speak of lace and ecclesiastical embroidery. New arts, such as enamel and mosaic, are being freely taken up by Irishmen. Wood-carving, I am sorry to say, has not advanced proportionately, and though we have much excellent brass and wrought iron work, there is still room for variety of treatment of the material. Our ecclesiastical plate, beautiful as it is, shows little influence from the work of recent designers. Indeed, most of our ecclesiastical work suffers from the want of freedom of drawing and the gross neglect of the plastic arts in the training of our workers. The Church, which is the poor man's expression of feeling for beauty, teaches him very practical lessons, outside of its spirituality, and he advances in artistic knowledge in proportion to its external development. The need for symbolic imagery has been neglected in modern times in Ireland, and its revival, which must occur sooner or later, should further enlist the services of our artists. From this constant call on the worker, and the security of profit and employment which it implies, the secular arts are bound to gain and increase.

The importation of Church work from abroad, while hitherto inevitable in some cases, and educational in its effect, has often done positive harm not only to our trade, but to our judgment. Our embroiderers have had to compete with tawdry work from factories. So, too, the stone-carver has had to estimate his work by its measure rather than by its merits. The posing figures sent us commonly from France, and particularly the garish extravagancies in stained glass from Germany, have set up a base taste, a Duessa from which we are beginning to turn away. The most worthy service done by the Arts and Crafts Society has been in its attempt to illustrate the essentials of good taste in its collections ; the need for such a standard is shown by the prominence given in many exhibitions to work that is false in principle.

Speaking thus frankly of our deficiencies, I have yet to say a few words about Ireland's advance in the arts. The Technical Schools, still new, and rather limited in their means and their scope, are doing solid and permanent good. What they need most at this moment is the full sympathy of our people. These training schools are rather isolated, needing connection with primary and other schools. They tempt the so-called amateur rather than the systematic worker. Our artisans should avail themselves to the fullest extent of the advantages they offer, and so provide Ireland with the skilled labour which is the only protection in many trades against foreign competition even in our own markets.

In the progress that Ireland has made the Arts and Crafts Society has played an important part. There has been a revolution in our printing and our book-binding; our tapestries and hand-tufted carpets are excellent and beautiful: our enamels have attained a subtlety beyond mere mechanical success. Some of our stained glass shows a character decidedly Irish. The attention of our people has been drawn by the Society to these creditable things, and to longer sustained work such as cabinet-making, in which Ireland shows remarkable skill and distinction.

While the Society is but part of a general movement, it has been to most Irish workers both a pioneer and a guide. M. Weale and his friends of the *Beffroi* did greater things for Belgium; but the Society of Arts and Crafts, starting without a Guild system to call on, or technical schools to work through, succeeded in winning the public mind of Ireland into sympathy with artistic effort. The times are changing, and a new era of work is opening before the Society.

Art Embroidery in Ireland.

By MRS. DOMVILE, (*née Beresford*.)

THE Home of Art Needlework in Ireland is certainly The Royal Irish School of Art Needlework, 20 Lincoln Place, Dublin. This School was founded over thirty years ago by the then Lord Lieutenant's wife, Countess Cowper, and, under her supervision flourished for some ten years. The School felt the depression of the troublous times in Ireland very severely; but was started again under new conditions by the Countess of Mayo in 1894. Since that date it has been entirely self-supporting; it gives constant employment to about thirty ladies, and does all in its power to raise the standard of Needlework in Ireland. It is under the superintendence of a committee of ladies (the Countess of Mayo president) and of a competent manageress. The balance sheet is published yearly, and shows satisfactory results. The School gives lessons in all branches of Art Embroidery, including Church work, and has proved most useful in giving lessons to Convents and to ladies wishing to make a trade of their embroidery. The principal feature of this industry during the past few years has been the embroidering of magnificent dresses, suitable for Court and other functions. Several beautiful dresses of this kind were executed for the King's Coronation, amongst them the dress worn by H.R.H. Princess Christian of Schleswig-

Holstein, and for the late Countess Cadogan, who was one of the best friends to all Irish Industries.

Lately the dress worn by the present Viceroy's wife, Her Excellency the Countess of Aberdeen, at her 2nd Drawing-room, was embroidered by the ladies in a splendid Celtic design.

Anyone wishing to see specimens of this dress embroidery should visit the show-case of Messrs. Switzer & Co. at the Irish International Exhibition, where six magnificent dresses are on view, made by this enterprising firm, and embroidered by their order at the Irish School of Art. There is no reason why all embroideries of this kind should not be executed in Ireland, if other firms would follow the example set by Messrs. Switzer, and place their orders in the various Irish Embroidery Industries, instead of sending them to Paris firms.

Work of this description could never be carried out by our smaller village industries, as it requires large space in which to place the long frames needed, but there is a branch of Dress Embroidery, "*Passementerie Trimming*," which is possible to be accomplished in the homes of the workers, and has been started successfully by Miss Dease, of Coole. This Industry gives much employment to many workers in London and France, and it is much to be hoped that it will some day develop into a special trade in Ireland.

Attention should also be called to the Ecclesiastical embroidery which has been sent from Ireland during the last few years. A Frontal was ordered by Her late Majesty Queen Victoria, for St. George's Chapel, Windsor, shortly before her death, and the order was ratified by His Majesty King Edward. This Frontal was designed by Mr. Comper, and worked by the ladies of the Irish School; it bore the Royal Arms of England and Hanover on each side, with the figure of St. George of England in the centre, on a ground of the Tudor rose of England, and this specimen of Irish Industries has been greatly admired.

The Flags presented by the people of Ireland to H.M.S. "*Hibernia*" were all made in Dublin, and many officers commanding regiments have shown their appreciation of Irish work by giving orders for their Company colours to be made in Dublin. Amongst those may be mentioned the Irish Guards, the Coldstream Guards, the Seaforth Highlanders, etc. Old Colours have also been repaired and restored, and Flags of Historical interest thus preserved.

Space prevents me from mentioning many other developments of Needlework, but enough has been said to prove that Art Needlework is really a trade in Ireland.

Art Metal Work and Wood Carving.

By the Editor.

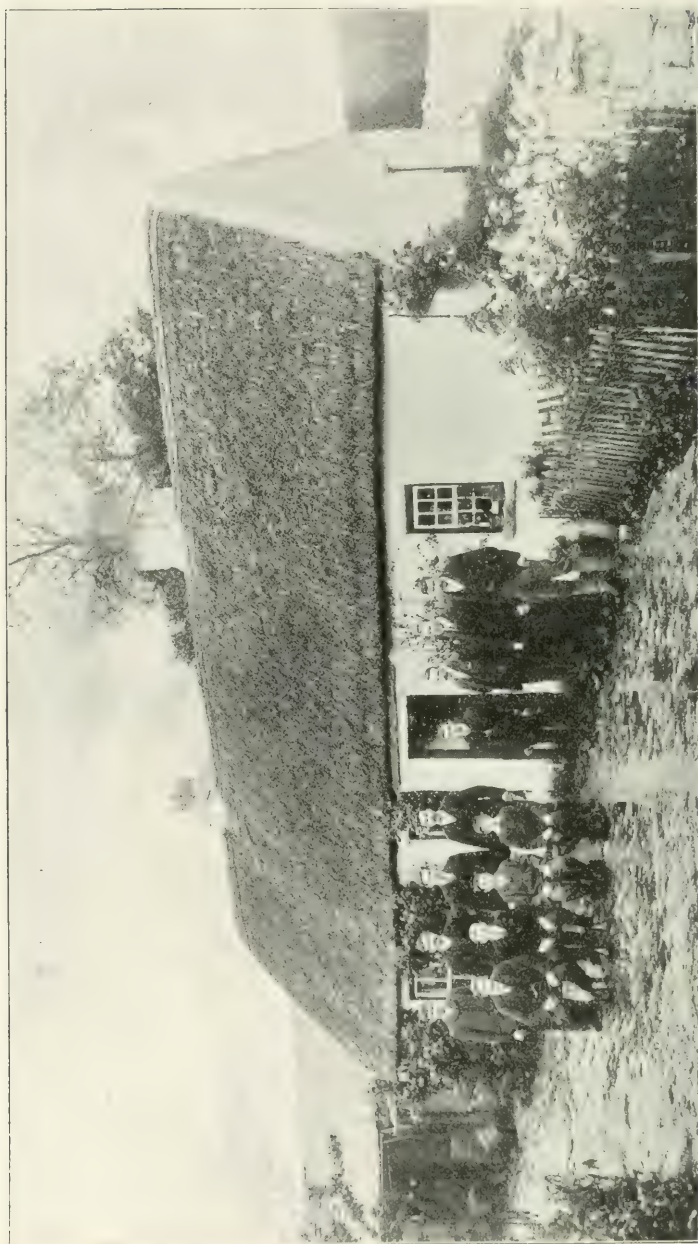
ART metal work, as has been stated elsewhere in this book, flourished in this country, and flourished when there was no art in England. Of late years attention has been again directed to its production in silver, copper and iron. For some time past commercial industries have existed in Dublin and in Cork, but it is also now found progressing satisfactorily in Fivemiletown in the North, and Youghal in the South. In the former repoussé work has reached the point where it may be said that it is one of the recognised rural industries of Ireland. Started in 1892 by Mrs. Montgomery, of Blessingbourne, the work has progressed to a high standard of excellence, and good orders are received from all parts of the three Kingdoms.

The industry in Youghal is only in its infancy, but there is no reason why, with the artistic disposition of the race, which is just as pronounced as in the Northern districts, the undertaking should not be made a commercial success.

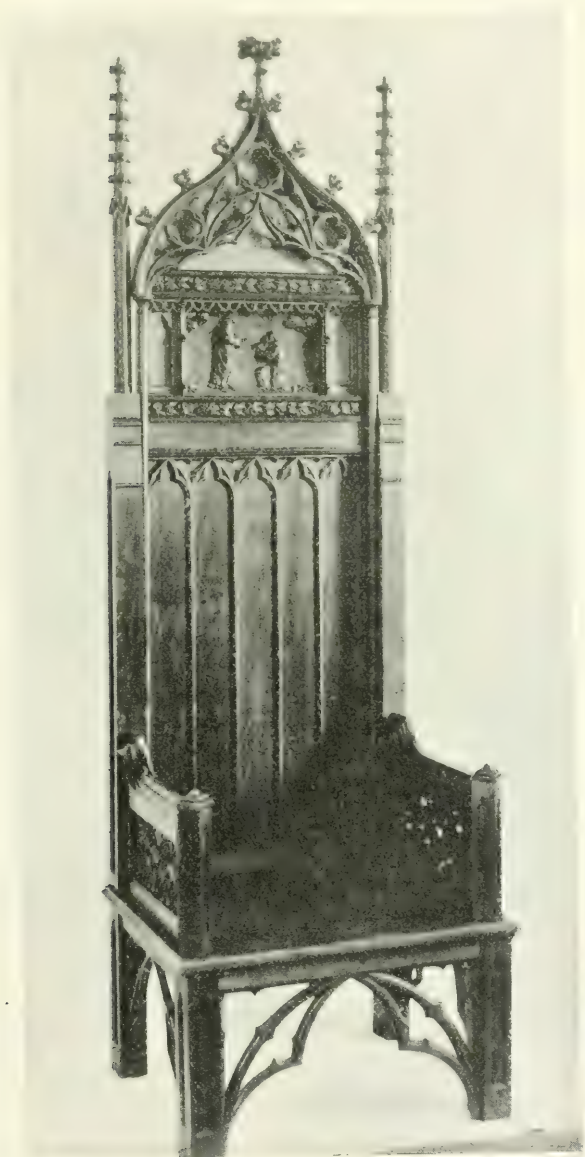
The tendency now-a-days of house decorators is to use artistic accessories in the shape of knockers, door handles, door plates, fenders and wall brackets, and it is in this direction that Fivemiletown is working. Such productions are a luxury: they can be more artistically done by hand than by machinery, and there should, therefore, be a future for work of this nature.

Wood carving has of late made considerable advances in Ireland, and industries capable of executing the highest class of carving are established in the Counties of Wicklow, Cork, Dublin, Limerick, Kilkenny, and at Killarney, and which schools, represented by specimens in the Home Industries Section, have attracted the attention of several important purchasers of carved wood work, one of whom states that up to the time of his visit he was unaware that such excellent panelling could be produced in Ireland. He utilises many thousand pounds worth in his business every year, and heretofore the major portion was from abroad, but in future he intends testing the Irish market before going elsewhere. This emphasises the desirability and, indeed, necessity of advertising if we wish our goods known outside our shores.

Under the heading of the Woollen Industry the fact is referred to that a Company has been formed in Kilkenny, who have built and equipped a woollen mill on the most up-to-date plans, and here it may be mentioned that another



A GROUP OF ART METAL WORKERS, FIVEMILETOWN.



BISHOP'S CHAIR.
(Bray Woodcarving Industry).

industry has been promoted in that city on similar lines, and which, although not confined to wood carving, may be appropriately included in this article—such is the “Wood Workers.”

The promoters have expended upwards of £15,000 in establishing the factory. They have built and equipped workshops with the best machinery, and which is driven by electricity generated by suction gas plant. Between 50 and 60 hands are employed, and the articles turned out are the highest class, Irish timber being largely used in connection therewith.

The firm have lately opened a depôt for their furniture in Dublin, and their display includes cabinet work, church furniture and office fittings. All goods sent out bear the Irish Trade Mark.

The aim being to produce the best work at competitive prices, there should be a good future before this industry.

As an instance of what can be done in “wood-working,” the industry at Edenderry, in King’s Co., may be mentioned. There will be seen Irish timber being manufactured by local labour (trained by Messrs. Alesbury Bros.) into chairs and many other articles in daily demand, most of which are at present imported—indeed, in 1905 the estimated value of imported furniture amounted to £402,203.

Connemara Marble and Pebble Cutting.

By a Manufacturer.

THIS industry might, with profit, be largely carried on in Ireland. The material is ready to hand—marble, the beauty of which could not be excelled, is obtainable in inexhaustible quantities, and capable of working into a great variety of ornamental objects.

The goods manufactured therefrom are to be seen in most of the curio shops in this country, and in England and Scotland, and yet, strange to relate, a large portion of what is sold in Ireland, not only made from Irish marble, but bog oak work and amethyst, are manufactured in Birmingham, the South of England, and on the Continent.

These are facts which should make the Irishman wake up, for the demand is there, and Irishmen possess the key to the situation; and it stands to reason that an article made where the raw material exists must be cheaper than an article which is made from raw material exported and returned in a manufactured state. If you look into the jewellers’ windows in the country towns in Ireland you will see brooches

and other ornaments bearing a Shamrock and made of Connemara marble. No doubt purchasers think that this is all made in Ireland; although it should be, it is not the case, for Birmingham is the principal supplier. One firm who, three years ago, had no trade in Ireland, now has a turnover of £3,000 per annum, and many towns have not yet been visited.

In England workers are to be seen plying the trade in their homes, cutting the various stones peculiar to their part of the country, such as in Cornwall, Aberystwyth, and Torquay.

There is nothing to cause the least doubt as to the success of this particular branch of work in Ireland; it does not



TOP OF TRINKET BOX INLAID WITH CONNEMARA MARBLE.

require special genius, simply application. There is employment for both sexes, and boys after two years' training, beginning at a wage of 4s. per week, can in four years rise to 25s. A man earns usually 7d. to 7½d. an hour, and can with ability and diligence rise to 35s. per week, while girls earn from 10s. to 13s. per week.

I do not intend to enumerate the great variety of goods which can be produced, but as one connected with the industry elsewhere, I may say that, given inducements on this side of the Channel, it would be possible to transfer such a business, with its markets acquired, to what should be its real home—Ireland.

Co-operation for Congestion.

By R. A. ANDERSON,

Secretary, Irish Agricultural Organisation Society.

PERMANENT POVERTY.

THE tourist visiting us sees little of real poverty or misery. Ireland gives him ungrudgingly of her best, and the general verdict is that the "distressful country" is maligned, and even if there is poverty it is picturesque, and the people seem to like it! One must leave the beaten track of the tourist if the truth about Irish poverty is to be realised.

Away in the western homes of the people will be found, year in and year out, a condition of human existence patiently, and in most cases hopelessly, endured by men and women, to whom the sole release can but be death, and by children into whose lives joy never enters, whose hearts as well as their bodies are starved by their surroundings. To these children there is but one hope, one ambition—to emigrate. And so they are going—all that is best of the Irish youth—at the rate of 40,000 a year, "out into the West," out of the nation's life, to learn another nation's ways, to absorb its thought, its ideas, its life, its politics, probably its vices, and to retain and foster a fanatical hatred of England rather than an affection for Ireland. There is something very wrong in the condition of things which permits one million Irish people to continue in a state of want, which now and then verges on starvation.

Many causes have contributed to bring about this chronic poverty. I can but deal briefly with one here, and suggest two simple remedies:—

CO-OPERATIVE CREDIT.

The Western peasant lives on credit. He buys in the worst and dearest market all that he requires for his household or his patch of land; his methods of cultivation are obsolete, ineffective and costly, and his scanty produce must perforce be sold in a cheap market, and frequently even be bartered for shop goods. Buying in the dearest market and selling in the cheapest, his scanty income has been thus reduced by nearly half its original purchasing power, and it is no wonder the distress of the "Congest" is chronic.

All over Europe a similar condition of things existed wherever farmers were small and poor; but elsewhere the peasant of latter years has been taught a simple system of thrift and industry, by which he has raised himself from

IRELAND.

Showing Number of Agricultural Credit Societies in each County in 1905.

SUMMARY.

Marked thus ☐

No. of Banks ..	..	232
Total Members ..	..	13,935
No. of Loans ..	..	7453
Loan Capital ..	£25,718	4 5
Deposits ..	12,710	7 11 3
Total Capital ..	38,428	12 8 3
.. Amt. of Loans	43,041	8 5
Expenses ..	186	12 6
Net Profit ..	531	8 5
Reserve Fund ..	1,717	17 10

Only 8 Banks showed a loss on year's trading, amounting to £4 2s. 8½d.

Verò. Sup.



Compiled from the latest Banking Statistics issued by The Department of Agriculture
and Technical Instruction for Ireland.

W. J. M-F

poverty to comfort in a way which no legislation by itself could have accomplished.

The people have banded themselves together into Rural Credit Societies or Village Banks. In the type to which I specially refer, every member pledges his *unlimited liability* for all sums of money which his society may borrow, for the purpose of being re-lent to himself and fellow-members. *Individually* none of these persons could borrow, except, perhaps, from some friend or from a usurer. *Collectively* they are regarded as being safe security for large sums. If an *individual* who borrows money fails, the lender stands to lose what he has lent; but the circumstances are altered when every honest man in the parish is surety for every borrower. "Every honest man." There is the secret of the stability of these banks; they admit none but honest, industrious, sober men. No matter how poor he may be his poverty is no disqualification, for the main security of these Banks is *character*. Then they do not lend for any but productive and economic purposes—objects which are practically certain to result in a profit or effect a saving to the borrower, such as the purchase of live stock, or farm seeds, or manures, or the avoidance of a forced sale of produce or stock in a bad market. The people call such loans "the lucky money."

There are approximately 250 of these Banks in Ireland and last year they lent £50,000 to their members without the loss of a penny to any person or banking company who advanced the capital. Their members obtained loans at 5 per cent., or at 6½ per cent., which is 1d. or 1¼d. per £1 per month, and the money was lent for as long as was required to make the loan produce a profit or an economy. So the people call it "the cheap money" as well as "the lucky money." These People's Banks are humble, unpretentious little institutions. Their operations extend only to a parish. They have no paid officials, no expensive offices. They are managed by a Committee appointed by the members, and this Committee meets regularly, when the day's work on the farm is done, and deals with applications for loans from their members. The Banks obtain their capital mainly from three sources:—Small loans at 3 per cent. made by the Department of Agriculture or the Congested Districts Board; deposits of money from the more well-to-do folk, on which interest at 4 per cent. is usually paid; and advances from the large banking companies at the same rate. The profit made by the Bank is the difference between what they pay in interest on their capital and what they receive as interest on loans made to their members. This usually works out at about 2 per cent.

This profit is never divided, but is added to a reserve fund, which is again lent out to members. Some Banks have upwards of £100 of a reserve. In time all will have large reserves of free capital, and will thus be able to reduce the rate of interest on their loans to even a lower point than at present.

The moral benefit of these Banks in Ireland, as abroad, is very remarkable. They tend to make their members more industrious, more thoughtful and more prudent, more punctual in their payments, and more sober. They bring a gleam of hope into the hearts of men where hope was almost dead, and they teach the difference between "borrowing to make and borrowing to spend," because no money is lent for improvident purposes. Every loan must have for its object the making of money, or the effecting of some economy for the borrower.

CO-OPERATION IN MARKETING.

Providing poor farmers with cheap money to develop their business is only the first step. Once they are placed in a position to secure capital, they must be shown how to invest it to the greatest advantage, how to produce in greater volume, and to improve the quality of their products. The same system of combination which secured them capital is again applied. They are taught to bulk their orders for agricultural goods, seeds, manures, feeding stuffs and implements. They are instructed how to bring their small parcels of produce together, so as to enable the heterogeneous collection to be classified, graded and packed for market. Between the individual western peasant and the market stand many middlemen. Each one who touches his produce exacts his toll. By co-operating with his fellows the smallest farmer may bring his small volume of produce within reach of the great world-market—England—and realise at a minimum of cost every penny that it is worth.

Without such a system as this no legislation, no Government aid can prevail against the crushing poverty, the pitiable helplessness which paralyses the Western seaboard of Ireland. With such a system the people will gradually become more self-reliant, more resourceful, and more comfortable. As the standard of comfort increases, so will increase the desire and the ability to provide the wherewithal to maintain it. As prosperity grows at home, so will the deadly stream of emigration gradually lessen, and those to whom Ireland now offers nothing but hardship and want will yet find in their own country a future worthy of the best traditions of the race.

IRELAND.

Showing General
Distribution
of
Flax Crop.



This was the idea which inspired Sir Horace Plunkett to found the co-operative movement in Ireland, and to create the Irish Agricultural Organisation Society to carry it on. It is the chief aim of that body to make this noble idea a great revivifying force in Ireland, and to all who desire the country's welfare the Society appeals to assist it in its work.

Flax Growing for Cottagers.

By O. W. H. ROULSTON, B.A.

Is flax growing possible for Irish agricultural labourers, and, if possible, is it practicable? The question is such as, on first thought, appears to admit of only one answer, and that in the unqualified negative. Due consideration of facts, however, will be found to modify in part such a position, and to show that the feasibility of the proposal is not so entirely fanciful as it may seem, and that within certain obvious limitations the bounds of the flax-growing industry may be yet extended with advantage on the lines above suggested.

An examination of the returns for last year (1906) discloses that 55,171 acres of flax were grown in Ireland, giving an estimated fibre yield of 911,812 tons, or an average return per acre of 4.3 cwt. In the main, flax growing in Ireland may be said to be confined to the Ulster counties, which last year assumed the following positions according to the area sown :—

	Acres.		Acres.
Antrim	.. 10,842	Donegal	.. 6,089
Down	.. 10,642	Armagh	.. 5,316
Londonderry	.. 9,151	Monaghan	.. 2,527
Tyrone	.. 8,980	Cavan	.. 1,167

Fermanagh, which is little of a tillage county, grew only 209 acres, an area, however, which exceeds the total quantity sown outside Ulster. Leinster last year was responsible for 76 acres; of this Louth, on account of its proximity to markets for the finished fibre, claimed 59 acres, Meath 15, and Longford 2. Of the Munster counties Cork alone grows flax to any extent. At one time the industry attained fair proportions in the districts of Bandon, and Skibbereen; but, as a crop, flax is now very sparsely sown down South, and last year was limited to 76 acres, chiefly in the Roscarberry district. The total flax acreage in Connaught in 1906 reached but 50 acres. Of this area Mayo grew 41 acres (mainly in the Ballina district), Leitrim 5 acres, Sligo 3, and Galway 1 acre

According to a return prepared in 1905 there were then 682 scutch mills in the country. The number of these working mills, however, shows a continuous contraction year by year, the above total being eight less than were available the year previous, and 33 less than were employed in 1900. The following table shows the facilities for scutching which exist in the five leading flax counties :—

	No. of Mills.			No. of Mills.	
Antrim	..	123	Donegal	..	100
Tyrone	..	123	Antrim	..	87

Outside Ulster there are now, it would appear, only eight flax cleaning mills in all. There are still two mills capable of work in Co. Cork, two in Co. Mayo, and two each in the neighbouring Leinster counties of Louth and Meath.

From the decrease in the number of mills it is not to be assumed that the cultivation of the crop is tending more and more into disfavour with farmers; on the contrary, there has been at the same time—at least in the years 1905 and 1906—a satisfactory increase in the total area sown and the quantity of Irish fibre produced. The following figures for the years 1904–1906 inclusive will make this fact obvious :—

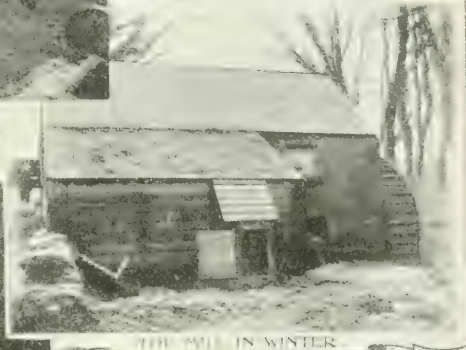
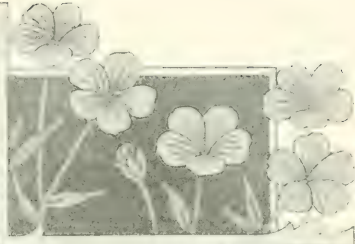
	Acres Sown		Fibre Produced (tons).	
1904	..	44,293	..	8,069
1905	..	46,158	..	10,073
1906	..	55,171	..	11,812

Furthermore, it is almost certain the returns for the present season (1907) will show still another marked increase on the acreage devoted to this crop. The contraction in the number of scutch mills consequently is not due to any falling off in the quantity of straw to be worked so much as to the tendency to erect larger, airier, and better ventilated mills containing a greater number of stocks, and with better facilities for the careful handling and cleaning of the fibre. In addition, the establishment of Flax Co-operative Societies has led to the consolidation and to the improvement of the scutching done in many districts, and much benefit to growers is likely to accrue from the extension of this system.

The above figures show that the flax-growing industry is still a large and permanent factor in the body of Irish agriculture, and that notwithstanding occasional fluctuations in its magnitude due to unfavourable seasons, or to low prices owing to stagnant conditions in the linen trade, there is every certainty of its continuing to maintain its position and its importance. Not only is this so, but owing to the stimulus given by the Department of Agriculture in urging upon



VIEW OF MILL RACE AND WATER WHEEL



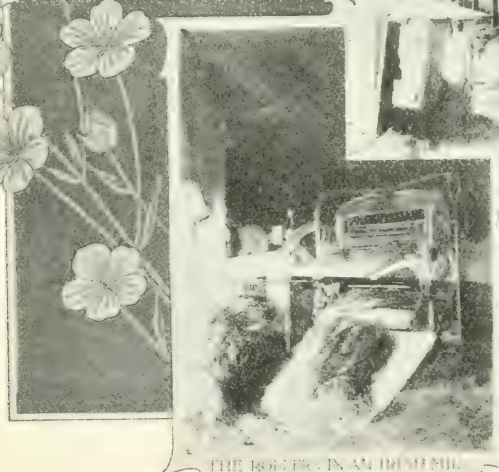
THE MILL IN WINTER



VIEW OF THE WATER WHEEL



GENERAL VIEW OF
THE WALKWAY



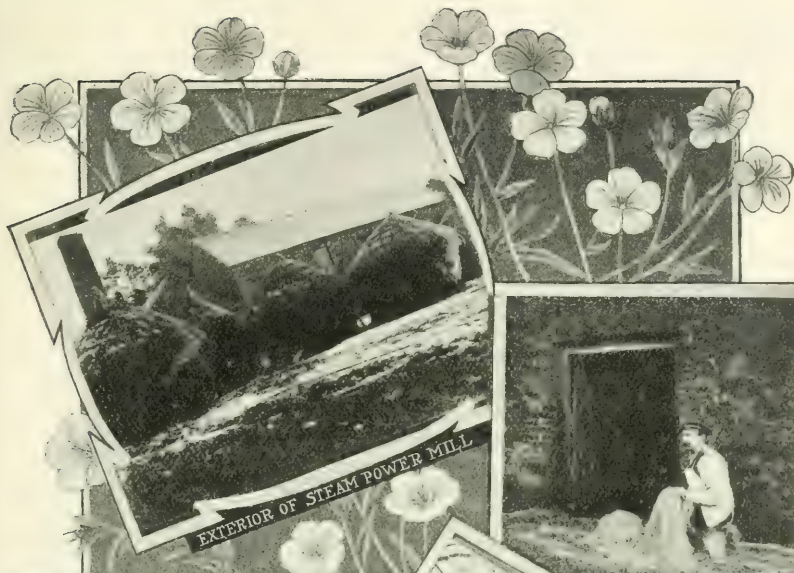
THE ROLLER IN AN IRON MILL



growers the necessity of sowing the finest quality of seed available, of applying the most requisite and profitable artificial dressings, and of handling and cleaning in the most approved manner, there is every prospect of the crop increasing in favour concomitantly with its profitableness and its stability as a source of considerable gain to the money income derivable from farm produce.

Returning to the question as to whether it will ever be possible for cottage owners to grow small patches of flax in their allotments, the outlook and the increasing spread of co-operative principles are in every respect favourable. None the less there are in the way considerable difficulties which may at once be stated and examined. In the first instance it is apparent that the cultivation of a small quantity of flax could only be undertaken by a labourer who has an acre allotment attached to his cottage. Flax, as is well known, is a crop which cannot be grown on the same land more than once in every seven years at least, and hence if the cottager worked his acre as two separate plots, he could so arrange it as to be able to take a flax crop off each alternate half once every third or fourth year. The second difficulty to the proposition lies in the fact that the cottager could not possibly provide any facilities for steeping, nor at that season of the year when engaged in the daily work of his employer could he spare the time to handle the crop through this stage even if he so desired. Selling the crop on foot is the one and only method of getting over this obstacle, a plan which it is impossible to doubt would work extremely satisfactorily. This is the method which Belgian growers adopt with their field crops, and there is no reason why the same system should not be found to operate successfully in Ireland. In Belgium the *fabricants*, as they are there termed, buy the flax on foot from the growers, and undertake the steeping, drying, and all the further operations until the finished fibre is put on the market. There is no reason why local farmers who have the available facilities and labour for steeping should not do likewise with any such plots grown as suggested, by cottagers.

If these two difficulties—(1) sufficient space and a suitable place in the garden rotation, and (2) a satisfactory means of selling the crop on foot—were met in the manner suggested, there are many advantages in favour of the cottager being able to raise a satisfactory crop. Owing to the small quantity of seed required for his plot there is more likelihood of his scrupulous care in ensuring that the seed he sows is of the highest quality. Further, the preparation of the fine seed-bed requisite, the skill in evenly sowing, and the care in getting suitably finished are certain to be more thorough than if done



on the larger scale, and are operations with which the cottager, owing to his experience of farm work, will be no doubt thoroughly conversant. Further, the after-weeding is likely to be more perfectly carried out and the patch kept ideally clean throughout the growing period. By arrangement with the farmer-buyer the pulling could also be most carefully and perfectly done by the cottager or his family. So that the intensive cultivation and the individual care in handling would both contribute to the production of fine, clean, strong, neatly-handled, green straw ready for the steep-hole.

The question originally proposed, which has been thus very briefly discussed, and entirely in a spirit of suggestion, is obviously not beyond the range of future possibility. Flax, it must be borne in mind, is essentially a labour crop—that is to say, it is a crop which most of all necessitates sinking a considerable amount of money in the labour bill before the finished article is ready for marketing. Thus the small growers in the North find in its cultivation their best and surest remuneration for individual labour; and why, it may be asked, should not cottagers and their families do the same?

It is worth while remembering in this connection that 37.9 per cent., or more than one-third of the total flax acreage in Ireland, is made up of small plots ranging from one rood to one acre. The flax crop is the mainstay of these small holders, and in it they find their principal means of paying rent, annual bills for clothing, etc. To the large grower the flax crop may be essentially a money crop, inasmuch as its disposal means the securing of a large sum to meet his financial requirements, but to the small grower it is at once a labour crop, and also a money crop; indeed because it is so much of the former it is of more value in the latter respect. Why, on the lines indicated, it should not also be an absorbent of remunerative labour from the cottager who has the skill, the industry, and the inclination to use the spare time about his own door, is a suggestion well within the range of possibility.



Winter Flower Growing in Ireland for the Market.

By J. H. MILES.

MANY thousand pounds worth of flowers are coming every year into the English and Irish markets from abroad which could equally as well be grown, and in some cases better grown, in favoured situations in Ireland. To ascertain what flowers are selling in the winter and spring markets we should study the columns of a paper like *The Fruit-grower*. There are three winter flowers which can always be grown at a profit—violets, anemone fulgens, and snowdrops. Of the three named the writer can specially recommend the violet. For many reasons this flower can be better grown in Ireland than elsewhere. It is also a more profitable flower here, lasting from early October to mid-April. There is no other flower, either here or elsewhere, with such a long season in profit.

VIOLETS should be grown in well-raised beds about 3 ft. 3 ins. wide, 14 ins. plant to plant, soil as rich as possible—fully 40 loads good stable manure to the acre. Use sea sand in quantities wherever possible, especially when the land is heavy; plant rooted runners, but this is not essential in such large flowered varieties as Princess of Wales, and in Luxonne the writer uses good strong unrooted runners. Of varieties three good sorts are Luxonne, Californian and Avellan. Luxonne is the finest violet I have yet handled, blooming from mid-October to end of April, standing 10 to 12 degrees of frost with impunity where Princess of Wales would be almost ruined (this variety is very useful in sheltered garden positions). Avellan purple is a good violet, its leaves are specially adapted for bunching in mid-winter (blooms October to end of February, and later sometimes). Californian (blue), excellent from mid-November to end of season.

After getting runners planted it is essential that they should be well weeded through the season; care must be taken when weeding that the young roots are not disturbed. Bunching violets is quite a special knowledge. A good plan for a novice would be to buy two or three bunches from a good florist and see how the bunches are made up. After bunching violets should remain in water at least a couple of hours before being packed. In packing, a line of grease-proof paper should go all round the inside of the box, so as to keep the air from the flowers. In marketing, a successful man will get hold of a good florist or two, and send the balance to

commission agents. Boxes should be bought in the flat, and can be had from any of the large timber merchants.

Of all winter flowers yet grown in Ireland the violet is, I should say, the best: Firstly, for its length of time in flower—October to April; secondly, conditions of the climate here are altogether favourable, summer rains and autumn mists produce the finest development, so that early autumn finds an immense plant of vigorous nature, giving flowers of great beauty of form, depth of colour, and scent unsurpassed, by any foreign flower. The hardness of the violet is astonishing. Last winter, with 14 degrees of frost one night and 7 degrees the following, I picked 7,000 Luxonne violets the same week from a quarter-acre patch. This soil was dark, and dark soils are certainly the warmest.

ANENOME FULGENS.—This is a lovely flower, but fickle. I have had one year's failure in four years of cultivation. But it is a splendid flower to pay, and essentially, too, an Irish flower, as it blooms here three months earlier than in England, and so commands a ready sale. I advise cultivators of *Anenome Fulgens* to go slow; if the soil and situation suit there is a small fortune in this flower. From two and three year old roots last year I got from two to three dozen flowers from a single root. Cultivate in raised beds, with sea sand if possible, very little manure and not touching the roots, unless the manure is old and well rotted. One must be careful about the purchase of these roots not to buy any cheap stuff. Keep the roots in the same beds for two years, then divide and replant from mid-August to mid-September. Beds must be well weeded all through the season. Flowers, twelve to a bunch, with six leaves; packing, same as violets; sales to florists and commission agents.

Anenome Fulgens commences to bloom here about the end of January, and we get a good many blooms with a mild February. Plants are usually in full bloom in the month of March.

SNOWDROPS can be grown in the grass in waste places, but not in damp situations. Beds about 2 ft. wide, bulbs about 2 inches deep, 4 inches bulb to bulb. Add fresh soil, and when the land is good replace the turf, giving a top-dressing every year, or every second year. Flowers, 24 to a bunch. Very much the same plan can be adopted with daffs. in variety, which will pay well when there is a good local market.

SUCCESS IN FLOWER GROWING.—The best advice I can give is to begin in a small way, learning generally whilst increasing your area in flowers. Method and energy are two great factors. Buyers require to have their flowers punctually

delivered, and their bunches of uniform size, having a good fresh appearance when unpacked. Flowers should never be packed wet—this is a very important point, size of bunches always the same (unless towards the end of the season, when, with a heavy competition, larger bunches are usually required). Gardening papers are often misleading on this point, advising one not to trouble about counting violets, whereas it is really but very little trouble and the grower would not know how to instruct his men to pick unless he calculated at per dozen bunches, the quantity required for his daily supply.

I employ men for strawberry growing and other work, generally have two, often three, and occasionally four. These are used on the violet land wherever necessary for planting, weeding and picking; girls and children for bunching, and girls very occasionally packing. Good cultivation with every care taken in bunching and packing flowers will enable home growers to compete with the foreigner, and secure the better prices. There can be no question but that the home-grown violet is infinitely the best.

The cost of winter flower growing depends entirely on local conditions, as what is the rate of wages in one district does not pertain in another. Again, in some places manure is easily obtainable, whereas in others it has to be brought from a distance, which naturally add to the cost of production. No article on violet growing in the South of Ireland would be complete without a reference to Lady Coghill,* who was the pioneer of the industry in this country, and it was owing to her success that I decided to come to the South-west of Ireland and start a violet and flower farm.

In conclusion, I may state that in the course of eight years' experience I have made flower growing pay well, but I attribute this to business methods, experience, proper cultivation of land, and always having my flowers well bunched and packed; anything badly done you may as well throw on the dust heap.

*NOTE BY EDITOR.—In 1897 a book published by the *Irish Homestead*, and entitled "Some Irish Industries," was issued in connection with the Irish Textile Exhibition, organised by the late Countess Cadogan. Therein was an article by Lady Coghill which concluded: "I pay £5 an acre rent for my farm, and I would think I had done extremely badly any year that I did not clear five rents for my pocket, after having paid all rent, wages, and incidental expenses, connected with my violet farm."

Bulb Farming in Ireland.

Anon.

It is only of late years that bulb farming has been realised to be a possible industry in this country, and certain varieties such as Narcissus and Tulips are grown to perfection, more particularly at Rush, in the Co. Dublin, and in the Co. Cork.

The district of Rush was formerly devoted entirely to the production of early potatoes and to the system of cultivation known as "conacre." To-day the visitor will see an area of 40 acres under bulb cultivation, and employing upwards of 100 hands—all, with the exception of three, belonging to the locality; and what a glow, and what a variety of colour may be seen at different periods is to be realised by those interested in gardening by the mention of the names of flowers, viz. :—Crocus, Daffodils, and Tulips, to be followed by Lilies, Ranunculus, Anenomes, Montbretia, Gladioli, Ixias, and Muscari.

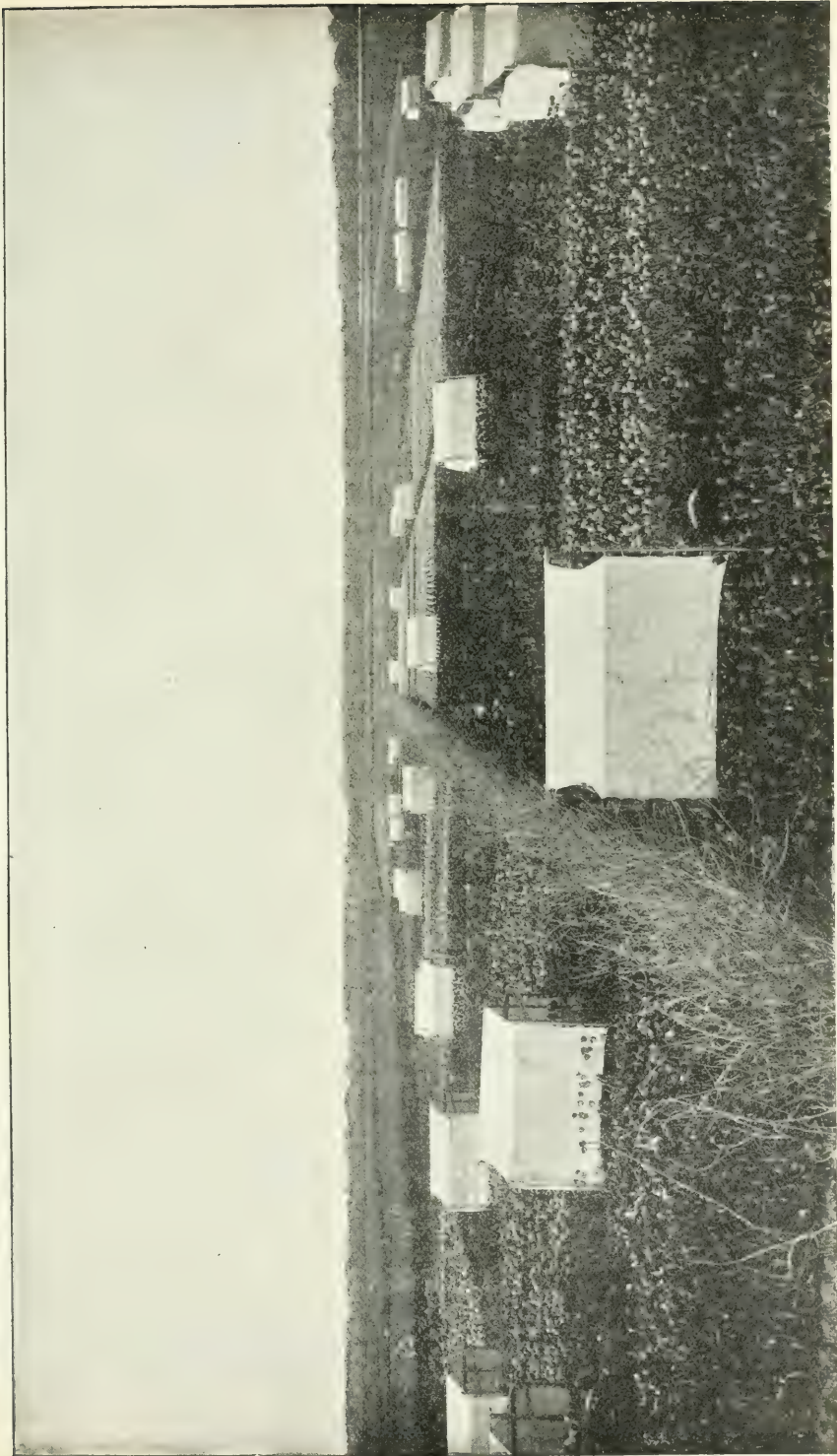
The undertaking owes its origin to Mr. James Robertson who, living as he does in the vicinity of Rush, and always having been identified with gardening, as were his father and grandfather before him, appreciated the qualities and possibilities of the Rush soil, and decided to institute an industry on a sound commercial basis.

Bulb farming in order to pay requires sandy land to produce well-skinned bulbs, and subsoil moisture to grow such bulbs to perfection. Both those qualities are to be found at Rush, and from its inception the industry has proved a success. The average value of an acre of bulbs when growing is from £350 to £400; and, in the case of daffodils, one bulb of a new variety frequently fetches as much as £30.

I have already mentioned the general varieties which are grown at Rush, but, it may be added, that over 500 varieties of Daffodils are to be seen, and more than 1,000 of Tulips.

In this farm adult male labour is employed for the cultivation of the land, which is all done by spade; women weed and plant, and children clean and prepare the bulbs for the market. A competent man earns 15s. a week, and can increase that wage to 19s. by overtime. Child labour is worth 4s. to 7s. per week.

This industry has added much colour to gardens in all parts of the world, and, whereas Ireland, England, and Scotland are the principal customers, quantities go to Australia, New Zealand, Canada and India, Japan, the



Portion of a field of Darwin Tulips at Robertson's Bulb Farm, Rush, Co. Dublin.

United States, Germany and Holland, which last country was at one time the bulb producer of the world.

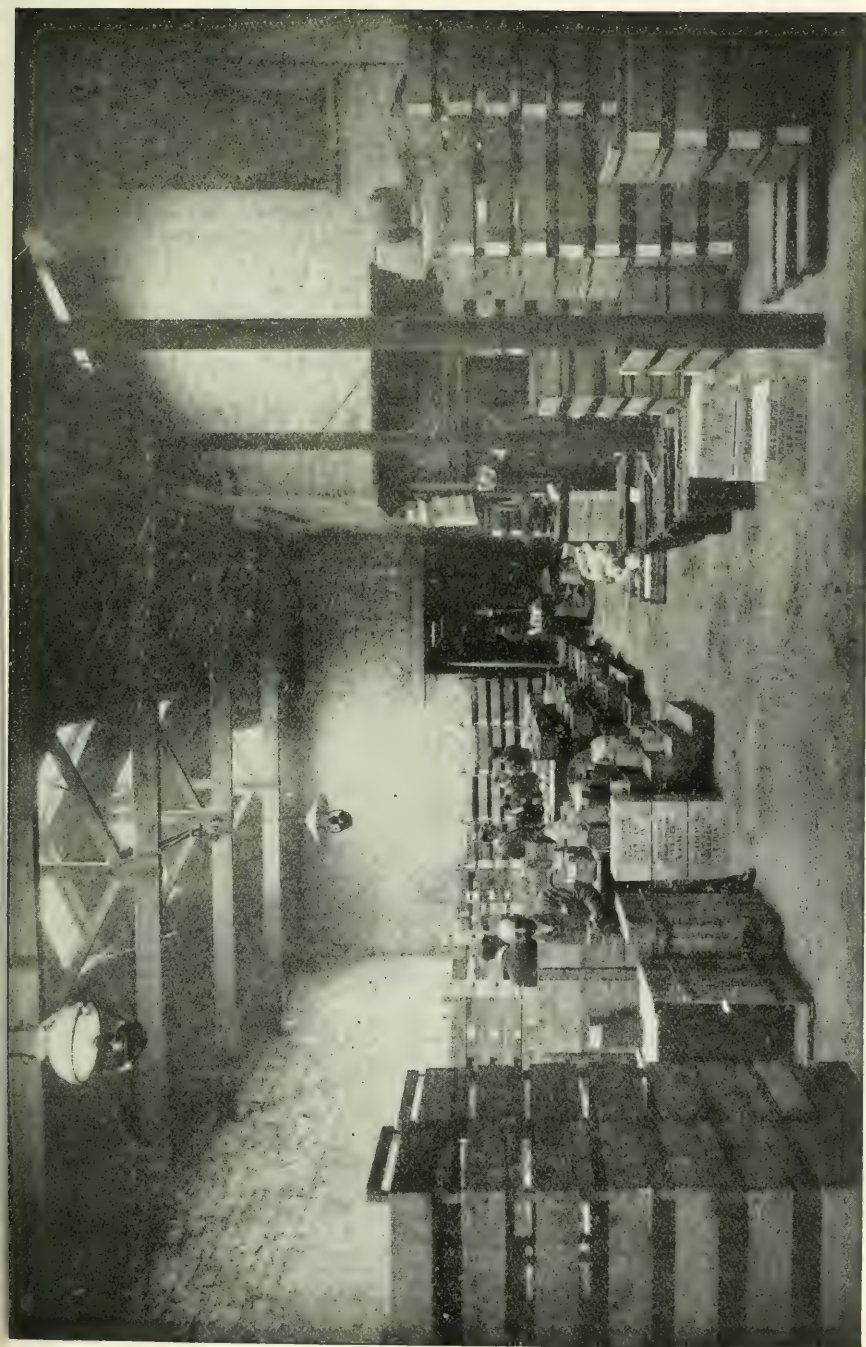
Anemone culture is carried on successfully at Geashill in the King's Co. by Messrs. Reamsbottom & Co. This has been brought to great perfection, and the "St. Brigid" will give a greater return in bloom for cutting purposes than many other flowers. This plant is of great variety in colour, and has only been brought to the success it has attained by careful selection and the weeding out of poor-looking specimens as soon as the blooms show. An indifferent strain is hardly worth while cultivating, but a good type is, without exception, the most exquisite mass of colour, every shade being obtainable with the exception of orange and yellow, but which ere long it is hoped will be possible of production.

An industry like this requires capital, technical training and adaptable labour. Comparisons are often drawn between the Irish and the English labourer; but the former, if properly handled, is equal and very often superior to the latter. To see Geashill Farm in full bloom is a sight of great beauty. Six statute acres being at times densely covered with almost every hue and shade. For such work it takes from two to four men per acre, and a competent man can earn about 15s. per week.

The effect of the industry upon the workers is to be seen by a visit to their homes, which are clean and neat, and hardly any emigration takes place from the district. The trade which has been built up reaches as far as New Zealand, and hundreds of thousands of Anenomes are shipped to Holland and are re-exported to England and, indeed, Ireland as Dutch produce. The plant does not take kindly to the Dutch soil. In a good season an acre properly cultivated can yield more profit than 10 acres of any other crop with, perhaps, the exception of tobacco.

From a commercial point of view it would not be worth while growing less than an acre of anemones or bulbs, and it would cost far more in proportion to cultivate an acre than it would a larger area.

There must be many places round the coast of this island where bulb farming could be carried on with success; but soil and climate are of little avail without systematic organisation.



View of one of Messrs. Hogg & Robertson's Warehouses. Packing Irish-grown bulbs for export.

Beekeeping.

By THE REV. J. G. DIGGES, M.A.

Editor, *Irish Bee Journal*: Author of "The Irish Bee Guide."

To the surprise of everyone who knows anything about it, Beekeeping is looked upon by many as a mere fad. Even thoughtful persons who are interested in progressive industries, take little account of the production of honey and wax. The



THE INDUSTRY AT KILTYCLOGHER, CO. LEITRIM.

1. MR. GALLAGHER'S APIARY. 2. THE LOCAL BEE FARM. 3. HIS FIRST SWARM.

man who keeps bees is classed with the man who keeps cats ; he is tolerated and pitied ; but it is by the few, and not by the many, that his work is taken seriously and its usefulness recognised.

Nevertheless, it may be confidently asserted that, in proportion with the amount of capital and labour involved, no other agricultural pursuit can show a like profit with Beekeeping. In a normal season, and under capable management, the capital invested may be made to return a profit of cent.

Area organised by The Irish Beekeepers' Association.

Marked thus

Showing Principal Centres
of

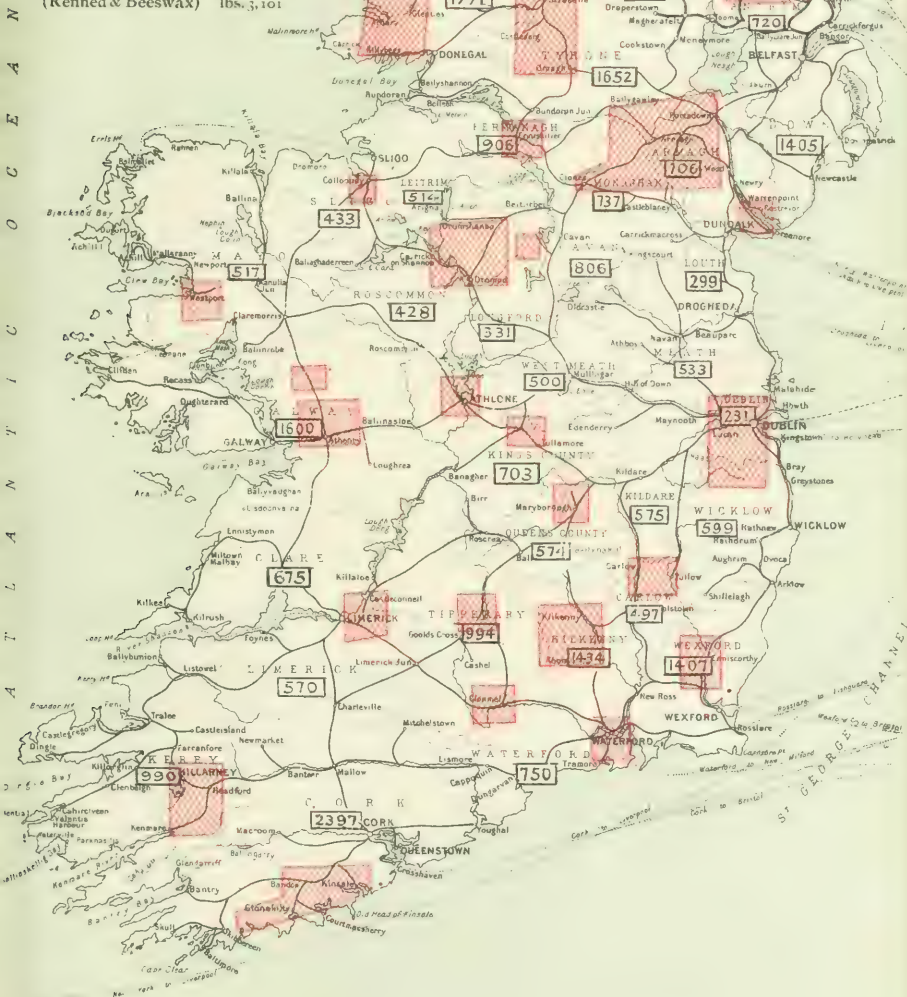
No. of Stocks in County, April 1st, 1906.

The Bee Keeping Industry.

Marked thus ☐

SUMMARY.

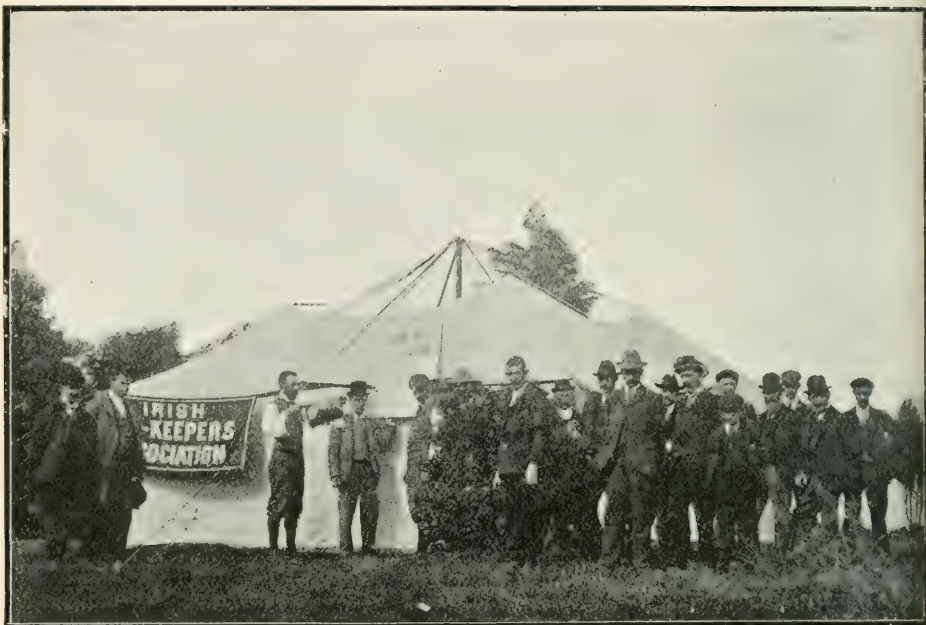
Total No. of Stocks,	
1st April, 1906 ...	26,769
Run Honey produced,	
1905 lbs.	148,577
Section Honey pro-	
duced, 1905 ...	lbs. 319,337
Wax Manufactured,	
1905	
(Refined & Beeswax) lbs.	3,101



per cent. In the United States, and in other countries, where the industry is carried on upon a large scale and men count their stocks of bees by thousands, handsome incomes are secured. Ireland, with the best market in the world almost at her doors, produces honey that is second to none. Great Britain's imports of honey from foreign countries within the past seven years amounted to £199,000. There is an opening for an enormous development of the industry in this country, and that development will take place when the possibilities of Beekeeping are realised by the people.

Of late years, Beekeeping in Ireland has made an attempt to occupy the position that it is entitled to among profitable rural industries. Its claims have been admitted, to some extent, by the Department of Agriculture and Technical Instruction, and by the County Councils. The Department have adopted a scheme which includes the appointment of instructors, and in some of the counties instructors are at work, model apiaries have been set up, and an effort is being made to establish the industry on a sound commercial basis.

The Irish Beekeepers' Association, which was founded in 1881, carries on its work by sending experts with Bee Tents to give demonstrations in modern Beekeeping, and as judges, at Agricultural and Horticultural Shows in all parts of the country, by circulating literature, examining and qualifying candidates for the Association's Experts' Certificates, awarding prizes and medals for exhibits, forming local associations in the Provinces, and by taking oversight generally of the promotion of improved methods of apiculture. The industry has also a literature of its own. The *Irish Bee Journal* was started in 1901 under the Association's auspices—an illustrated monthly publication, which has enjoyed remarkable success, and has secured an extensive circulation, not only in Ireland, but also in Great Britain and foreign countries. The "Irish Bee Guide," published in 1904, is the Association's Hand-book, and has been useful to a large extent in bringing the advantages of modern methods home to the minds of the people. These are signs of progress which show that the interests of the industry are not being altogether overlooked. A more vigorous propaganda is required. Organisation on a wider scale than any hitherto attempted is called for. There is now a splendid opportunity to place pure Irish honey on the English market, in competition with less excellent honey raised six thousand miles away, much of which is from syrup-fed stocks, and is adulterated with glucose. Our people must be taught that there is money in Beekeeping, that the beautiful hills and valleys of this fair land may be made to produce a harvest



Reproduced from IRISH BEE JOURNAL.

[By Permission.]

THE BEE TENT.—EXAMINING CANDIDATES FOR EXPERTS' CERTIFICATES.



Reproduced from IRISH BEE JOURNAL.

[By Permission.]

A MODEL APIARY IN CO. ARMAGH.

of honey to the value of from £150,000 to £200,000 per annum, and that of this possible output all but a few thousand pounds worth goes to loss.

Beekeeping, as a profitable industry, has much to recommend it as one that is in many ways suited to this country. It is one that requires on the part of the beekeeper little capital, no broad acres, labour that is light, and of time—only what may be snatched from even a busy life without detriment to other pursuits. It is open-air work, healthy, interesting,



Reproduced from IRISH BEE JOURNAL.]

[By Permission.]

LADY BEEKEEPERS.

and even fascinating. Ladies and children may engage in it. Labourers and farmers, school teachers and pupils, farmers' wives and daughters, are numbered in the ranks of successful beekeepers; nor is there in all Ireland an earnest man or woman, boy or girl, but might, through Beekeeping, add £10, or £20, or £30 a year to the family purse.

It must, however, be stated here that successful results can be obtained only by the practise of modern methods. Beekeeping as an industry dates from the earliest times, long before Virgil (70 B.C.) described in verse his study of

the habits of the honey bee. But we are indebted to such investigators as Huber (1750), Dzierzon (1838), and Langstroth (1851) for having devised methods by which bees may be brought under control, and their labour be made a source of profit to man. The skep and the box, as receptacles for bees, have given place to the modern movable-comb hive; the produce of the bees' labour has been enormously increased; and it has been made possible for anyone who understands what it means to take pains, to manage bees with a handsome profit to himself, and to subdue them to



Reproduced from IRISH BEE JOURNAL.

[By Permission]

A SUCCESSFUL BEEKEEPER.

his will. It is to the improved methods that in Beekeeping, as in all other successful industries, we must attribute the progress that has been made in recent years. It has been demonstrated again and again that, with the use of modern appliances, a knowledge of the habits of the bee, and reasonable care, results can be attained far beyond the dreams of the old-fashioned skeppist. There are men in Ireland to-day who can market £200 worth of honey per annum without any serious encroachment upon their time or energy.

The *Irish Bee Journal*, in 1902, published an account of the success achieved by a beekeeper in Leinster, a portrait of whom, in his apiary, is reproduced here. In 1887 he discovered a vagrant swarm, hived it temporarily in a skep, and started the study and practice of Beekeeping. Five years later his stocks had increased to 84, and his profits amounted to over £100 per annum. Last year the writer received a letter from a public official in that county, in which he said :—

“ People in this county have latterly taken very much to Beekeeping, for the reason that one man has bought two large farms from the profits derived from bees. This is what I call a practical lesson.”

A “ practical lesson ” it is, and one that may well be impressed upon our fellow-countrymen. What he has done multitudes can do. For any who would enter upon the industry the facilities are greater now than ever before. The Irish Beekeepers’ Association is always ready to offer assistance, and advice may be obtained on application to M. H. Read, Esq., Hon. Sec., I.B.K.A., Coolgreena, Terenure, Dublin ; or to the Editor, *Irish Bee Journal*, Lough Rynn, Co. Leitrim.



Tobacco Growing in Ireland.

By *COLONEL N. T. EVERARD, H.M.I..*

President, The Irish Tobacco Growers' Association.

THE history of tobacco growing in Ireland is easily told. Sir Walter Raleigh planted tobacco, which he had brought from America, in his garden in County Cork about the year 1586, probably the first place in Europe in which tobacco was acclimatised.

The cultivation of tobacco spread rapidly, and would undoubtedly have become a source of great wealth to Ireland if the predominant partner had not prohibited it under the severest penalties, in order to give a monopoly of the trade to her American Colonies. In 1779, the Colonies having declared their independence, Ireland was once more permitted to grow tobacco. The industry was just beginning to take root when trade jealousies again intervened, and secured the re-enactment of the Statutes prohibiting the cultivation of tobacco in Ireland.



Photo by G. N. Keller]

[Tobacco Expert.
A CORNER OF RANDLESTOWN TOBACCO
FARM.

Since 1830, therefore, tobacco growing has ceased to be an Irish industry. Small plot experiments were, however, permitted. In 1887 and up to the year 1904 experiments were carried on at Randlestown in the Co. Meath, and in 1900 and 1901 trials were made in several other counties. Owing to the successful results obtained, in 1904 the Chancellor of the Exchequer consented to allow a commercial experiment to be made, and twenty acres of tobacco were planted at Randlestown in that year. The results proved very satisfactory, and established the fact that tobacco of good quality could be grown in Ireland. In the following year the Department of Agriculture and Technical Instruction further assisted tobacco growers by providing them with the

Showing location
of
Tobacco Culture,
1907.

Marked thus 

services of a qualified expert, and by building barns in two other counties. These experiments were on a considerable scale, and were all more or less successful. Tobacco is now being cultivated in seven counties—Meath, Louth, Wexford, King's County, Kilkenny, Limerick, and Cork—about 100 acres altogether. (See map.)

The selection of varieties best suited to the soil and climate of Ireland must be a work of time. Out of 200, or more, known varieties less than 30 have so far been tried. The exhibit in the Home Industries Section illustrates the processes of growing and curing tobacco. The samples of cured



Photo by G. N. Keller

[*Tobacco Expert.*

BRINGING IN IRISH TOBACCO TO THE BARN.

tobacco shown are of three distinct types, viz.:—heavy shipping, cigarette and cigar leaf, which tobacco experts declare to be equal to the average produce of foreign countries.

It is hoped that the Irish Tobacco Bill, which has passed through both Houses of Parliament without opposition, will come into force next year, and that a considerable extension of tobacco growing will be the result.

There is no crop which provides so much employment and affords so much scope for the exercise of skill and care. Every leaf has to be handled separately at least twice, and

sorted with the utmost precision. In Sumatra tobacco, for instance, there are nine sizes of leaf of eight grades each, making in all 72 classifications. Ireland is a country which although admirably adapted for the cultivation of the highest class of tobacco has yet to acquire the necessary skill and experience which in other countries is both inherited and traditional.

The cost of production varies with the class of tobacco raised.

In the cultivation and curing of cigar leaf £50 per statute acre can be profitably expended, and, as a large proportion



Photo by G. N. Keller]

AN IRISH TOBACCO BARN.

[Tobacco Expert.

of this expenditure is for wages earned during the winter months, it is possible that tobacco may be the means of solving one of our most pressing social problems, namely—how to provide continuous employment for agricultural labourers and their families. The profits realised vary also with the type of tobacco raised.

Tobacco fulfils in every respect the conditions wherein, according to John Stuart Mill, “on mere principles of political economy protecting duties can be defensible.” not to speak of the historical claim for exceptional treatment in regard to the tobacco industry. The cost of materials for erecting the necessary barn accommodation is also heavier than in other countries. Until tobacco growers have been educated up to

the level of those with whom the processes are traditional they can hardly be expected to tackle so highly technical an industry as that of cigar leaf production, which, when once established, would undoubtedly be able to compete on even terms with the produce of older tobacco-raising countries. The tobacco worker cannot be a mere automaton, he must know the underlying principles of his work; his occupation has an elevating tendency, requiring the exercise of thought, thereby broadening the mind. Tobacco is the greatest of all revenue producers, and is, consequently, fostered and protected in every country where to provide employment for the people at home is the Government's first concern.*

Gardening in Small Holdings.

By P. F. GRAY,

Agricultural Instructor, Albert Agricultural College, Glasgow.

THERE is always a pleasure and a profit to be derived from a garden, however small, if it be well tilled and judiciously cropped. Fruit and vegetables, well grown, command the highest prices, and there is, at all times, a ready sale in the Dublin market for cut flowers.

The selection of a piece of ground for your garden is the first thing to be considered. It should be well sheltered from the cutting north and east winds, and, as far as possible, the aspect ought to be a sunny one. The selection and size of the garden having been determined, it should be well fenced in, and for this purpose a thorn hedge is deemed the most suitable. If the soil be wet, or at all retentive of moisture, it will require draining.

Manuring is next to be considered. If the soil be a deep fibrous loam, well-decomposed farmyard manure is best, if of a clayey nature, half-decomposed horse dung, and if of a sandy texture, a good dressing of cow manure may be applied with advantage.

When dividing the ground into plots, it is advisable to have them square, if possible; the centre walk should be about

*NOTE BY EDITOR.—When Colonel Everard was looking for a suitable screen to protect his Tobacco from harsh winds, he decided to experiment with hemp, and not only did the hemp prove efficacious for the purpose selected, but it grew to a height of 12ft. 2in., and which result, will, it is believed, lead to further experiments with hemp as a crop, for, as is pointed out on the specimen exhibited in the "Home Industries Section," Ireland in 1774 supplied the whole British Navy with sails made of hemp.

three feet wide, and for any side-walks, or paths, two and a half feet will suffice—merely room to allow a wheelbarrow to pass through for manuring when necessary.

Cropping by Rotation.—This is a most important point in the cultivation of a vegetable garden, and to carry it through with success, the following rules must be strictly adhered to, viz. :—

1.—Plants cultivated for their roots or bulbs, such as parsnips, carrots, beet, and onions, should be followed by those grown for their leaves or flower-heads, such as cabbage, cauliflowers and broccoli.

2.—Plants cultivated for their leaves or flower-heads should be followed by those grown for their roots or bulbs.

3.—Plants that are of a perennial character, and occupy the ground for several years, such as rhubarb, seakale, etc., should be followed by annuals, or those lasting but one year.

Amongst the many advantages gained by a rotation of crops, insects become less numerous, the vegetables are sound and healthy, of a better quality, and an increased supply.

For large gardens, keep the crops in plots or divisions by themselves, as the ground can then receive a special preparation for each individual crop, and it follows the yield will be increased thereby, and the quality improved.

In small gardens a variety of crops may be sown in the same plot, keeping each kind in a line by itself, thus getting a greater variety from a given space of ground, which, of course, is a consideration. The first of these modes is termed *separate cropping*, and the latter *simultaneous cropping*.

The ground intended for the cultivation of root crops, such as parsnips, carrots, potatoes, and beet, as also for bulbous ones, such as onions, turnips, etc., should be manured in October, and the manure deeply dug into the soil, which should then be turned up into rough ridges and left until Spring, when they may be levelled down, deeply dug over, and prepared for sowing the various root and bulb crops.

Sowing.—Many amateurs make mistakes in the sowing of flower and vegetable seeds. Either they sow too early, too thickly, or cover too deeply. The only seeds that should be sown broadcast are those intended to be transplanted, such as cabbages, cauliflowers, brussels sprouts, lettuce, and leeks. All others are sown in drills, varying from 6 to 12 inches apart. This method affords every facility for cultivating the ground, eradicating weeds, and, when necessary, applying artificial manures. Select a nice, calm day for sowing, and always have the soil fine and dry. Bear in mind the southern portion of your garden is best adapted for the cultivation of

dwarf peas, French beans, cauliflowers, lettuce, early potatoes, and here, also I should like to see your collection of pot herbs, which include parsley, thyme, mint, etc.

As already stated there is always a demand for cut flowers, and those most sought after are violets, carnations, pinks, roses, narcissus, lily-of-the-valley, tulips, etc., all of which succeed best in a nice warm border.

The plots, or open ground, should be devoted to the more hardy and stronger growing vegetables, such as parsnips, cabbages, onions, etc.

Select a cool situation for raspberries, gooseberries, and currants, and if space will permit, a few dwarf apple trees. Strawberries will make a capital edging for your walks, and if the runners are kept cut away, good crops will be the result. They should be planted one foot apart in single rows. Attention should be paid to the packing of all garden produce for market, and more particularly to the grading of fruit. Utilize all available space, and let there be no waste ground in your garden.

Old gardens, or those that have been producing vegetables for a number of years, can be much improved by trenching, and, in conclusion, it may not be out of place here to briefly describe the operation.

Commence thus :—First place a quantity of well-rotted farmyard manure in convenient heaps over the ground. Then at the lower end of the plot to be trenched, mark off with the garden line a breadth of two feet ; dig this out to a similar depth, cart to opposite end, place in a long ridge, where it will remain until the whole plot is trenched over, when it should be used to fill in the last trench made.

Before proceeding to open the second trench, loosen well, with digging fork, the bottom of the first one, care being taken to leave the earth as rough as possible. Now mark off trench No. 2, a similar width to No. 1, digging it the full depth of spade, taking care to have the spits as narrow as possible. Cast this top earth into the bottom of the first trench, cover it evenly with a layer of manure, about four inches thick, then dig out another spading as before, turn it over the manure, and leave it as rough as possible. Keep each trench a similar depth, and have the bottom of each rough like the first. Proceed thus until the last trench is reached, when it should be filled in with earth taken out of the first, placing in a layer of manure as before, and filling level with the surface.

Of course this depth of trenching will only answer where the soil is uniform in quality to a depth of two feet. You must moderate this if the ground be stony or on land that

has only a shallow depth of good soil, covering a gravel or clay subsoil, otherwise the good surface soil will be buried deeply, and an inferior soil will be near the surface.

The proper time to carry out this work is October, or early in November. By doing it at this time, you gain all the advantages of the frosts and snows of winter. These, together with a good dressing of quicklime will have the effect of destroying insects and their larvæ, putting more heart into the soil, and otherwise materially improving the land.

The following are grown by small holders in other countries for market :—

				T. C.	
				4	10
French Beans.	Average yield for 3 years				
Strawberries	" "	6	"	2	2
Raspberries	" "	6	"	2	0
Black Currants	" "	3	"	0	3
Peas	" "	3	"	2	12

Mushrooms, blackberries, hurts, and crabs are much neglected in most parts of Ireland; they are valuable and cost nothing to produce.

Mushrooms require to be gathered young, carefully packed in small boxes or baskets. Blackberries and hurts must be fully ripe before picking, and put up in a similar manner for market.

NOTE BY EDITOR.—There is a large demand in the manufacturing towns of England for the wild fruits above mentioned, and a Company has lately been formed in the County Tipperary for the systematic collection, grading, packing and distributing of such. Many districts exist where similar steps could be taken, and the wild areas, viz., mountain and moor, await organisation which, when perfected, will yield new money to many.



Cottage Gardening.

By E. KNOWLDIN, F.R.H.S.

INDUSTRIAL development under all its manifold phases has, presumably, one end and aim—viz., the lifting up of the poorer and consequently weaker members of the race from apathy and dependence, into those healthier and happier conditions which go to make “a bold peasantry their country’s pride.” If this is admitted but a little reflection can hardly fail to show the potency of “the purest of human pleasures” as a factor in our political economy.

Cottage gardening in Ireland is conspicuous by its absence. This from a comparative point of view. Pleasant exceptions there are, but as the strongest lights throw the deepest shadows, they more forcibly show what is, and what might be. What is, as exemplified by the so-called garden given over to the ubiquitous hen, and that troublesome vegetable, potato : and what might be—viz., the humble cottage home framed in borders of old-fashioned flowers, with its well-tilled plot of herbs and vegetables, and its moral corollary of thrift and sturdy independence. Such examples, alas ! so few, are of inestimable value, for “men often *er* follow models than rules.”

“We want our cottagers to sweeten their lives by growing the dear old-fashioned flowers of the long ago : Cabbage roses, Sweetwilliams, Pinks, and Pansies, Fairmaids of France, “Daintie Ladyes,” and the big fragrant bushes of Sweetbriar, and Rosemary ; for first steps in this direction invariably trend towards the scarlet Geranium and Yellow Calceolaria—the outward and visible signs of that bedding craze which has permeated the high places of the gardening world, and of which we have sufficient to satiety. And we want our cottagers, too, to keep to the old-fashioned names, and run not after “words of long length and thund’ring sound.”

The garden attached to No. 2 prize cottage of the Home Industries section, about 100 feet long by 30 feet wide in extent, is my ideal of what a cottage garden should be in size. It is not too large for the cottager in regular employment to manipulate in his spare time, and it is large enough to supply a family of, say, six with vegetables all the year round, including a few drills of early potatoes, as well as some fruit bushes in the way of Gooseberries, Currants, and Raspberries. As for the staple supply of potatoes, that should be catered for elsewhere, on the allotment, or “con-acre” system, as circumstances permit, or opportunity

affords. To give up the garden to such is merely reverting to the old order of things. We mention this because old customs not only die hard, but are apt to reassert their disagreeable presence. Such, indeed, has occurred, and "where once a garden smiled," *Ichabod*—its glory has departed. The Beehive, by the way, in the above-mentioned model cottage garden is suggestive of what should be in all gardens. The objection raised to this mixed cottage gardening (in Ireland) is that the Irish family has come to depend on the potato and regard all else as superfluous. This should not be, for of all crops surely the potato is the least dependable, and in the onion and parsnip, for instance, are to be found edible roots of superior nutritive value.

I know of two or three Horticultural Societies that are working strenuously, and with a fair amount of success in promoting a better order of things among the cottagers. It apparently is only by such organisations that any considerable progress is likely to be made, and the extension of them is surely worthy the consideration of those keenly interested in Irish industrial development. I have but briefly discussed the practical advantages to be derived from this phase of it, but they are neither small nor few. It is not within my province to broach polemical matter, but I cannot refrain from expressing a thought that herein lies a not unimportant factor in the settlement of the Irish question. Who shall measure the heights and depths of those more subtle, yet not less real benefits, when the humblest disciple becomes aware that, in Carlyle's words, "Inanimate nature is no longer an insensible assemblage of colours and perfumes, but a mysterious presence with which he communes in unutterable sympathy. It may be thought visionary—impracticable,—yet the recognition can hardly be withheld that even the humblest may grasp the higher things of life, and then—

"He wanders away and away,
With Nature, the dear old nurse,
And she sings to him night and day
The songs of the Universe ;
And if ever the way seems long,
And his heart begins to fail,
She sings him a yet more wonderful song.
Or tells a more glorious tale."

A Village Hall :

How to have it and how to work it.

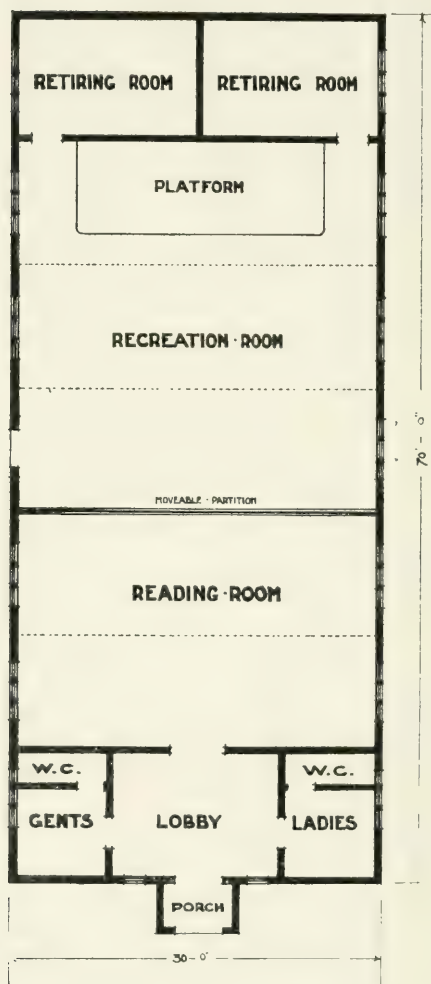
REV. P. J. DOWLING, C.M.

How to stem the tide of emigration is a question that must force itself on the attention of every true Irishman. To those who have given a superficial attention to the matter it seems a simple question ; all who consider it in its manifold bearings find it a very complex problem. No one remedy is sufficient. Just as a river derives its volume, not from one stream, but from every rivulet that trickles on its watershed, so the stream of Ireland's manhood and womanhood to the emigrant steamer is supplied from many sources. If, therefore, we wish to stop that river we must try to deal with its source of supply under every aspect. Diligent students of this question are nearly all agreed that the monotony and dreariness of our rural life is no idle agent in swelling the tide of emigration, and if we wish to change the condition of affairs we must try to improve the social life of our country districts ; we must try to provide recreation and amusement for the dwellers on the country side.

The Village Hall presents an opportunity of dealing with this aspect of a difficult problem. If every village or town of small size were provided with a centre where the recreation side of life would be provided for, then a great gap would be filled, and the position of the would-be emigrant would appear more unreasonable. The providing of such a hall seems to depend on the appreciation of its necessity and a little vigour and co-operation on the part of those who earnestly and sincerely wish to lend a hand in this great work of keeping Young Ireland at home.

Admitting that we desire to help in this great work, the first step would be the formation of a committee or association to take the work in hands. I would suggest a committee formed in the following manner : it should be made up of the local clergy, the principal of the National School, the representatives of the Rural District and County Council. This would give a sufficient number to start the committee, and, if advisable, they could co-opt some of the principal persons in the locality. But I should plead for the members I have mentioned above as those who should automatically belong to the committee.

The next step would be the providing of the hall. Luckily in the Home Industries Section of the Exhibition we have a sample hall. It is cheap in cost and fully provided for its



HUMPHREYS LTD., Dublin and London.

functions. It is equipped with a stage, lantern screen and lantern, and divided in such a way as to provide a reading and games' room for ordinary occasions, and a large room for special occasions. It is lighted by an independent system

of lighting which can be put down anywhere, and renders one free of the trouble of oil lamps, local want of gas, etc., and other troubles incidental to rural life. As to the money needed to put up such a hall, we can hope to have a share in the Pembroke Bequest, which has set aside a large sum of money to provide such halls throughout Ireland. This bequest is in the hands of most sympathetic Trustees, who are most eager for the erection of these halls.

Assuming that the local committee has decided on having a hall, and has procured the necessary funds for its erection, and have the pleasure of seeing it in being, the next question is—how to run the said hall?

Let us review the various purposes for which this hall may be used, and we shall distinguish between the ordinary and extraordinary. It might be used ordinarily for a reading and recreation room. In these days of cheap literature there should be little difficulty in providing a small supply of books. In the first place the Department of Agriculture is prepared to give a supply of books, which are of a character suited to develop the technical training of the people. Then there is scarcely a periodical of importance that would not give a supply of back numbers to such a hall. In addition, a canvass by the members of the committee would procure many a volume for the village library. As to the providing of games and recreation materials, a concert or two would go far in this direction.

Now, as for the occasional uses of the hall: They would fall under the head of lectures, concerts, band performances, dances, debates, feisanna, local exhibitions, etc. It may seem paradoxical, but the very multiplication of halls makes the running of them easier. At present when there is only a scattered Young Men's Society or local society, there is very little inducement to anyone to cater for the wants of village or any other halls. But, suppose for a moment that you had a large number of these halls scattered through the country, then it would be well worth the while of a lecturer, say, to provide himself with an equipment of slides, and to make a livelihood going from hall to hall. A party that organises a concert at present is confined to one locality. If you multiply the halls you multiply the chances of such a concert. At present it is given in one place and done with. If there were such opportunities as I contemplate, the same concert party could give the same concert in six or more different places. The various companies might even be brought into rivalry, and a prize could be given for the best concert produced by the local talent of different halls—a feature that may be brought into existence before the

Exhibition closes. Then as for debates—and I think there is nothing sharpens the wits of people more and encourages in a greater degree a taste for reading than a well-managed debating society—there could be debates got up between the society of one hall and that of another, a development of the debating society which is intensely popular. There is also the question of local bands. In another paper in this volume it is shown how easy it would be to organise bands. At present the difficulty lies in getting a competent instructor; but this difficulty arises from the fewness of the bands. If we had a village band in every place of any size, then it would pay a man well to go round evening after evening to each place and give instruction in each locality. These village musicians would give an added interest to the local performances, and also an Inter-competition scheme would help forward the village hall idea in every centre.

Then we have lantern lectures. Only recently I met one of our most distinguished Irish prelates, who expressed his regret that the lantern was not more popularised in Ireland. To-day, with the scenery of the world, the events of history, all the treasures of art galleries, the discoveries of science brought into view by the aid of the photographer, the lantern is most powerful in the education of the masses. As for the lecture itself: there is scarcely a subject on which there is not a printed lecture, the reading of which gives ample illustration to the slides. Slides on almost every subject can be hired for a trifle. Mason or Mayne, of Dublin, will be only too happy to help any organiser of lantern lectures, and Riley of Bradford, or Tyler of London, have introduced a new feature called the Lantern Slide Library, whereby a thousand slides can be hired for £1, and the surplus of the year can be credited to the account of the next. There is nothing in which greater facilities are provided than in the matter of lantern lectures. Here again the multiplication of halls will make things easier. Lecturers, lanterns, slides, etc., can be lent from hall to hall, and it will soon become a commercial speculation for young Irishmen and women to take up lantern work and go from hall to hall providing a pleasant evening's entertainment.

This brief and imperfect outline will show all who take an interest in social Ireland how large is the part to be played by the village hall, and may encourage those who are thinking along such lines to go a step further, and pass from possibility to actuality by the creation of a village hall in their locality.

A Plea for Village Halls.

By R. S.

No one who takes a serious interest in the social and industrial regeneration of Ireland can afford to ignore the question of the deadly dulness of life in our smaller towns and villages. It is one of the serious problems that have to be faced in any scheme for building up the nation, and but little reflection is needed to reveal its intimate connection with the two great problems of emigration and intemperance.

First, as to its bearing on the emigration question. Of course it cannot be denied that the causes of Irish emigration



AN ENGLISH VILLAGE HALL.

are in the main economic. The limited number and scope of our industries, and the consequent dearth of employment constitute the predominating factors. But the monotony of our rural life, the absence of adequate facilities for social intercourse and amusement, also play their part in the tragedy of the nation's decay. Hence it is that to the Irish boy or girl, brought up amid the grey, drab surroundings of an Irish village, the call of the great cities beyond the ocean, with all their bustling, throbbing life and many social allurements, possesses a peculiarly seductive power that proves irresistible even in cases where a decent livelihood at home is assured.

Then again, viewing the matter from the standpoint of the temperance reformer, it cannot be denied that the most practical means of coping with the drink habit is to provide a counter attraction to the public-house. Mere preaching won't do. Temperance campaigns that exhaust all their energies in dilating on the moral and physical consequences of intemperance are insufficient. The public-house must find a rival. So long as the taproom furnishes practically the only medium of social intercourse, the way of the temperance reformer will be strewn with difficulties.

And now I come to the subject proper of this article. I do not suggest that the wholesale erection of village halls all over the country will have the direct effect of closing up the public-houses and rendering the emigration agents' occupation a sinecure. But I do assert that the beneficial effects will be far-reaching and important. The statement needs no labouring. A hall, equipped with a reading room, a small library, a recreation room, and, perhaps, a gymnasium, would, if its advantages were fully availed of, effect a great revolution in the whole social life of the average village community, and would have a permanent value in the moulding and development of the character of the people, and particularly of the young. It would, above all things, awaken a desire for intellectual culture, at present altogether too rare.

The question of funds is, of course, the big difficulty in the way. We cannot hope that a bountiful Irish millionaire will come along and go one better than Mr. Carnegie by presenting each village with a structure of the kind indicated. We shall have to proceed on the basis that the halls must be built by the people themselves. Therefore, in order that the idea may be carried into practical effect, it is of first importance that the necessary outlay be of moderate proportions. Unfortunately, in Ireland, the margin that exists between the cost of the bare necessities of life and the wage-earning capacity, or rather the wage-earning opportunities, of the people is too small to permit of many luxuries. The cheapest type of building consistent with comfort, adequate accommodation, and a fairly presentable appearance, is, therefore, what is needed.

The visitor to the International Exhibition will find an admirable example of this class of building in the Model Village Hall, erected in connection with the Home Industries Section. Ornamental in appearance, it is 70ft. long by 30ft. in width, and is capable of seating 250 people. It is constructed of corrugated iron, and the cost of erecting a similar edifice in any part of Ireland would be £400. Should this

amount not be forthcoming, a smaller building of the same type could be erected at a lesser cost. The minimum cost of a building of this kind is £150, but at this low figure the structure would measure only 50ft. by 20ft., and have seating accommodation for but 100 persons.

These corrugated iron structures have become extremely popular in English rural communities of recent years, and their number is rapidly on the increase. Thanks to the generosity of such men as Sir Joceyn Gore Booth, of Lissadel, Co. Sligo, some specimens are also to be found in this country. Inquiries which I have made go to show that the cost can be defrayed on the instalment plan: the period of payment being capable of extension over two, three, or four years, in accordance with the needs of the particular case. The expense of maintenance is exceedingly small—not more than one per cent. per annum—and another advantage is that, in case a larger building may be found to be necessary at any subsequent period, the original building can be disposed of at half the prime outlay. Handsome in design, comfortable, airy and well lighted, and being at the same time procurable at a moderate expenditure, this type of village hall seems in all respects well calculated to meet the requirements of an Irish rural community.

Village Hospitals.

THE Hospital erected in the Home Industries Section has as its object the drawing attention to the need for small hospitals in the poor and thinly-populated parts of Ireland. In the Congested Districts particularly, where, owing to local circumstances, it is most difficult to provide medical aid and nursing for the sick on account of the scattered position of the population and the distances which have at present to be traversed, in the event of accidents or other surgical or medical cases requiring prompt treatment and special care, it is desirable that small hospitals should be provided in connection with the existing Dispensaries, where patients unfit for removal over a long distance may receive treatment.

In considering the plan of the Hospital, it has been of prime importance to reduce the cost of construction and maintenance to an amount which would be proportionate to the resources of the locality. The design adopted aims at supplying the simplest and cheapest form of hospital, and of the smallest size compatible with utility, and is sufficient for

treating four cases in two wards, besides giving accommodation for two nurses and a servant.

It may be hoped that possibly a small hospital—such as the one erected—will be provided in some of the districts where Lady Dudley's Nurses are at work and that the nurses in future, if the funds permit, will be sent out in twos instead of singly. Both nurses could live in the hospital, and take it in turns to perform out-door and in-door duty, removing to the hospital such urgent cases as could not be efficiently treated in their own homes. The Medical Officer of the Dispensary District might have the hospital under his charge.

In wealthier districts the hospital might be a larger and more substantial structure.

The Committee considered that their model should be devoted to showing what could be done in very poor districts where the need of such hospitals is greatest, and that a practical example on the simplest and most economical lines might be of more use than the erection of a more expensive and more attractive building.

The Hospital has been designed by Mr. F. J. MacCabe, C.E., Local Government Board, and has been erected by Messrs. Humphreys, Ltd., who are prepared to make portable hospitals of this design, which can be easily and cheaply erected, the cost being £285, delivered to the nearest railway station and erected on Purchaser's Foundation—Purchaser paying carriage from railway station to the site.

The Hospital has been furnished by Messrs. Millar & Beatty, Grafton Street; the Surgical Instruments and Appliances being supplied by Messrs. Fannin & Company, Grafton Street, Dublin; and the Medicines by Messrs. Boileau & Boyd, Bride Street, Dublin. The Lighting is by the Pitner Lighting Co., Lincoln Place, Dublin.



Scheme for the Establishment of District Nurses in the Poorer Parts of Ireland.

By *THE COUNTESS OF DUDLEY.*

A LITTLE more than four years ago a Scheme was inaugurated in Ireland for the purpose of providing the more destitute and poverty-stricken of the agricultural districts with an organised system of trained district nurses.

To those familiar with the conditions of rural life in these Irish districts the necessity for granting such sick relief by means of subscriptions and donations from the charitable

public requires no explanation. But to others, unacquainted with the harassing problems which perplex those who are desirous of seeing dwellers in the congested districts released from some of the hardships of their present existence, a few words of enlightenment are, perhaps, necessary. The chief justification for the establishment of a charitable scheme, such as this, is the fact that the population in these parts of Ireland, being purely agricultural and acutely poverty-stricken, is unable either by means of voluntary contributions or by the



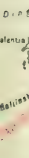
NURSE BRADY, CO. DONEGAL.

levying of a rate to assist itself or the District Councils to provide proper nursing relief. Moreover, as there are in most of these districts practically no resident gentry or well-to-do inhabitants of the middle classes, little or no assistance from local sources can be obtained. The only course, therefore, which remained open to the promoters of the Scheme, who recognised the necessity for meeting without delay the urgent requirements of these poor people, was to make an appeal for funds to the charitable public, not only of Ireland, but of the United Kingdom. The response at the time was considerable, and permitted the establishment of nine nurses in some of the poorest districts during the first

A T L A N T I C C E A N

A T L A N T I C

A T





NURSE LOUGHREY, MALLINMORE, CO. DONEGAL.

year. And the support given at its inception to the project has been so steadily continued that this number has been increased during the three following years. until there are at the present time fifteen nurses at work in different parts of



NURSE KAVANAGH, ARRANMORE ISLAND, CO. DONEGAL.

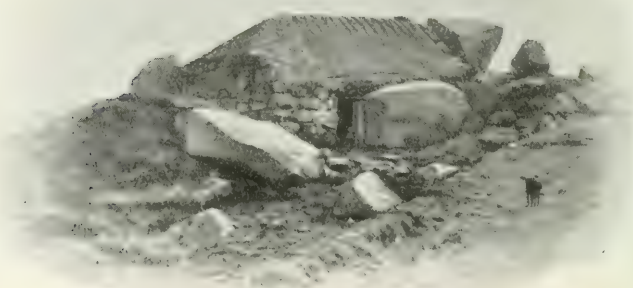
Ireland under the Scheme. All of them are endowed, as far as possible, on a permanent basis, by means of an annual subscription list, together with an income derived from money received in donations and invested in trust securities. No nurse is appointed until the income necessary for her establish-



A CO. MAYO DWELLING.

ment and maintenance is already in the hands of the Committee of the Scheme.

As affording a purely impartial criticism upon the methods of the Committee responsible for the administration of the Scheme, it is permissible to insert the following extract from



THE HOME OF A PATIENT.

the Report of the Vice-Regal Commission on Poor Law Reform in Ireland, published in 1906 :—

“In our opinion the remarkable and unquestionable success of the Scheme for the establishment of District Nurses in the poorest parts of Ireland is due very largely



NURSE CUSACK, CO. GALWAY.

“ to the selection of highly-qualified nurses of experience and
“ aptitude, with character and resource that enable them to
“ discharge their lonely and laborious duty efficiently and with
“ general satisfaction. These nurses have, we believe,
“ gained the affection and respect of those they attend, and



NURSE ON TOUR, CO. GALWAY.



A HOUSE ON INISHNEE ISLAND, CO. GALWAY.

“apart from the actual good they do to patients under the
“direction of the Dispensary Doctor, they are most useful
“advocates for sanitary conditions in the houses and
“surroundings of those with whom they come in contact.”

There is no space here for even a brief mention of a few of the countless instances of distress and suffering which prove



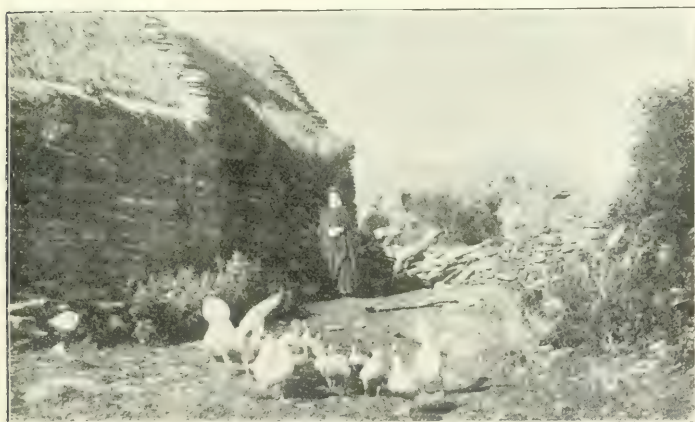
A CO. GALWAY PATIENT.

the pressing need for relief in times of sickness for these poor people. Sufficient to say that such proof constantly coming into the hands of the Committee furnishes a resistless appeal for a further extension of this system of trained nurses to other remote and poverty-stricken districts, whose need has not yet been met owing to lack of funds. Such an extension



A CO. KERRY DWELLING.

would be of inestimable value in more than one respect. First, as a mitigation of the sufferings of these poor people in times of sickness and child-birth, and during epidemics caused by neglect through ignorance of the simplest precautions. Secondly, as a civilising and educating influence which shall do something towards raising the standard of living in



NURSE WALSH AT GLENGARRIFF, CO. CORK.

these districts, the lowness of which constantly hampers the efforts and projects which have been initiated and carried out by the Congested Districts Board and other beneficial institutions during the past nearly twenty years.

To Irish men and women, and to all lovers of Ireland who desire to see the work of her social and economic salvation

reach its fullest consummation, this is a matter of national importance. It is also one which makes a peculiar and pressing appeal to the many in our country who do not listen with deaf ears to any project which has for its primary object the relief of distress and the alleviation of unnecessary suffering.

Nurses are at present working under Lady Dudley's Scheme in fifteen districts :—

NURSE BRADY	..	Annagry, Co. Donegal.
NURSE LOUGHREY		Mallinmore, Co. Donegal.
NURSE KAVANAGH		Arranmore Island, Co. Donegal.
NURSE M'WILLIAM		Keel, Achill Island, Co. Mayo.
NURSE MORAN	..	Geesala, Bangor Erris, Co. Mayo.
NURSE DOYLE	..	Ballycroy, Co. Mayo.
NURSE COMERFORD		Pulathomas, Bangor Erris, Co. Mayo.
NURSE DALY	..	Foxford, Co. Mayo.
NURSE STANILAND	..	Bealadangan, Costello, Co. Galway.
NURSE M'COY	..	Carna, Co. Galway.
NURSE HOGAN	..	Cashel, Co. Galway.
NURSE HARRIS	..	Spiddal, Co. Galway.
NURSE DONALD	..	Caherdaniel, Co. Kerry.
NURSE DE LARGY	..	Dooks, Glenbeigh, Co. Kerry (Kill- orglin and Glenbeigh).
NURSE WALSHE	..	Glengarriff, Co. Cork.

Model Labourers' Cottages.

Two model dwellings for rural labourers have been erected in the Home Industries Section, with the object of affording a practical demonstration to those interested in the important question of housing the working classes in rural districts.

Since 1883 local authorities in Ireland have, under a series of Acts, been empowered to provide dwellings and gardens for agricultural labourers, and in 1906 their powers were considerably extended, with the result that the procedure has been simplified, the incidental expenses diminished, and the burden of the ratepayer lightened by favourable terms of raising and repaying loans.



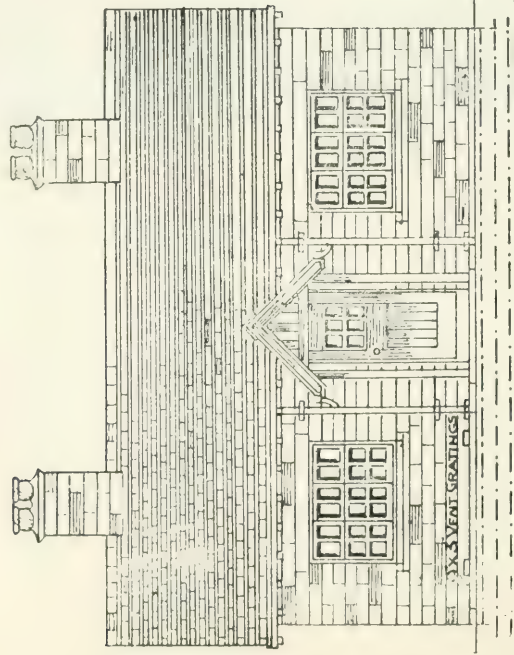
WHAT THE MODEL LABOURERS' COTTAGES ARE INTENDED TO REPLACE.

Under the Labourers Act, 1906, a sum of £4,250,000 was allocated by the Government for loans to rural authorities for housing operations, repayable in $68\frac{1}{2}$ years by annual instalments of $3\frac{1}{4}$ per cent., covering principal and interest.

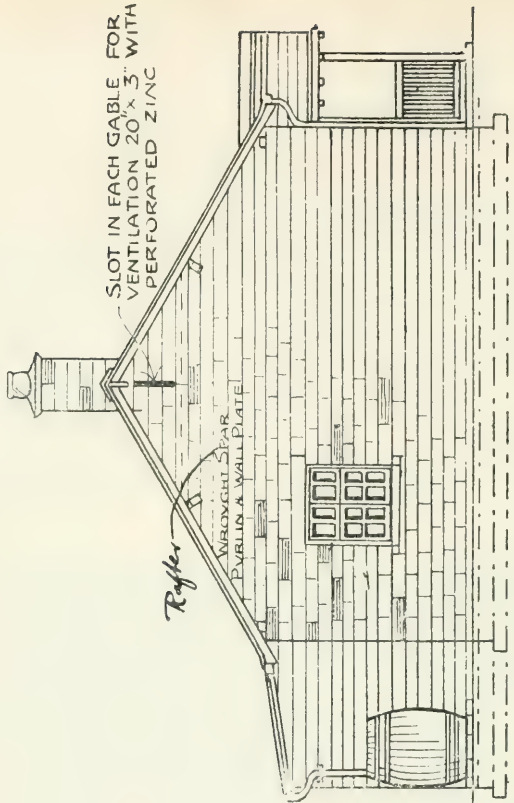
In administering the recent Act, it is of importance in the interests both of ratepayers and of occupants of the cottages that the best results in the matter of construction should be obtained as regards durability, cost and accommodation, so that the maximum number of houses may be provided for the sum allocated, and the houses continue in tenable condition for at least the full period of the loan.

With this end in view the Local Government Board arranged a prize competition for plans of cottages, subject to

Labourers (Ireland) Act, 1907.



FRONT ELEVATION



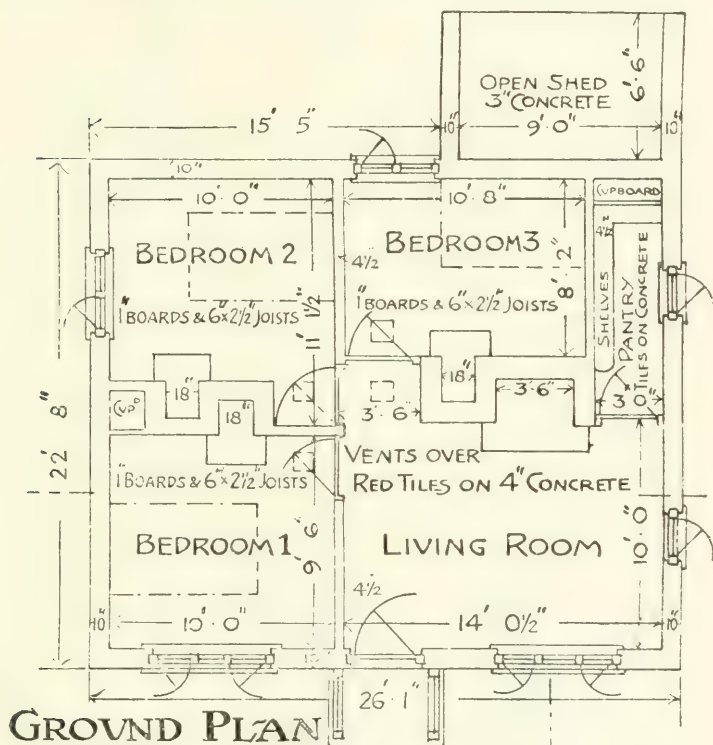
SIDE ELEVATION



SCALE OF FEET

a limit of cost amounting to £130. The competition evidently proved attractive to architects, as nearly 400 competitors sent in designs.

The two model cottages erected in the Home Industries Section represent the plans which obtained the first and second prize respectively, and it is anticipated that, under ordinary



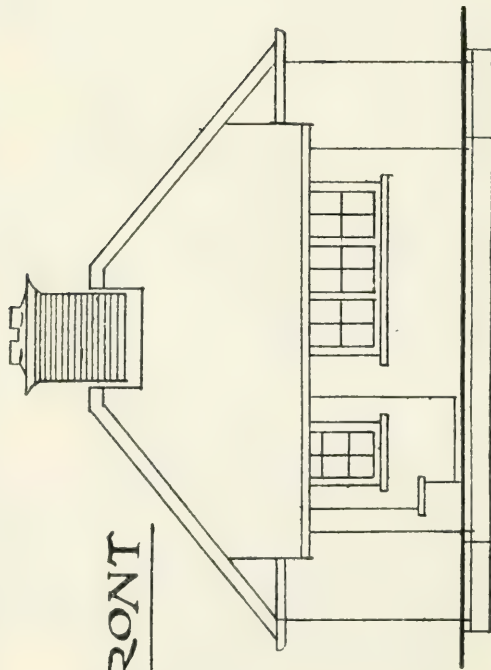
GROUND PLAN OF DESIGN A.

circumstances, houses of similar design can be built in most rural districts for an outlay of about £130 each.

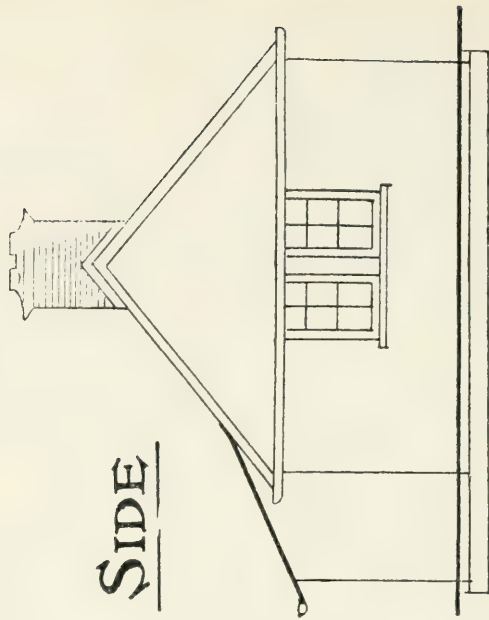
The 1st Prize Cottage has been erected by the Block Concrete Company, Limited, Liverpool, at their own expense. The chief advantages claimed for building in block concrete are cheapness and simplicity in construction and dryness of the material. The latter is a most important consideration in a damp climate like that of Ireland, and should induce

SCALE; 1 inch = 8 feet

FRONT



SIDE

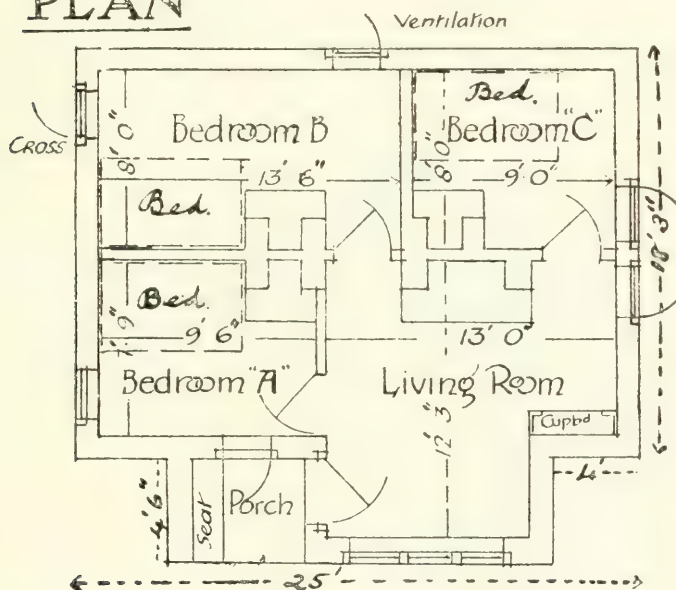


MODEL PLANS FOR LABOURERS' COTTAGES. — DESIGN B.

those charged with the erection of houses for the labourers to seriously consider whether this form of concrete should not be given a trial, particularly in districts where sand is easily obtained, and where brick is not available.

The 1st Prize Cottage is designed to accommodate about six persons—two adults and four children, which is a little over the average family of the agricultural labourer. Four rooms are provided—a living room and kitchen combined, with a cubic capacity of 1,500 cubic feet, a principal bedroom

PLAN

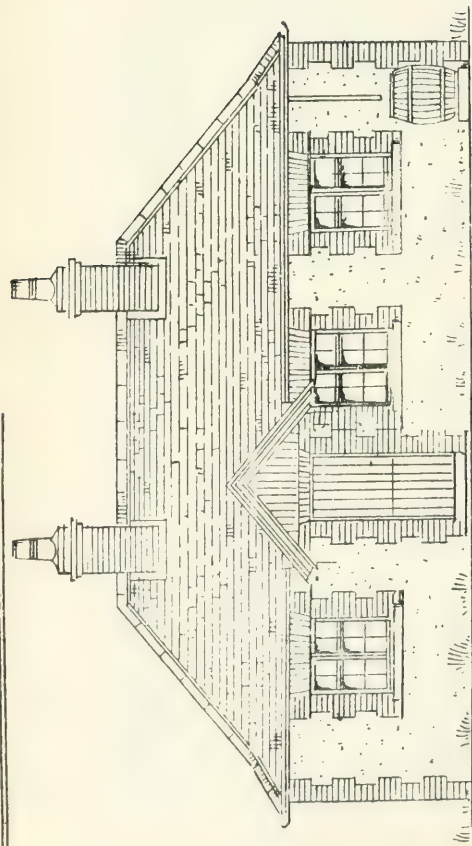


GROUND PLAN OF DESIGN B.

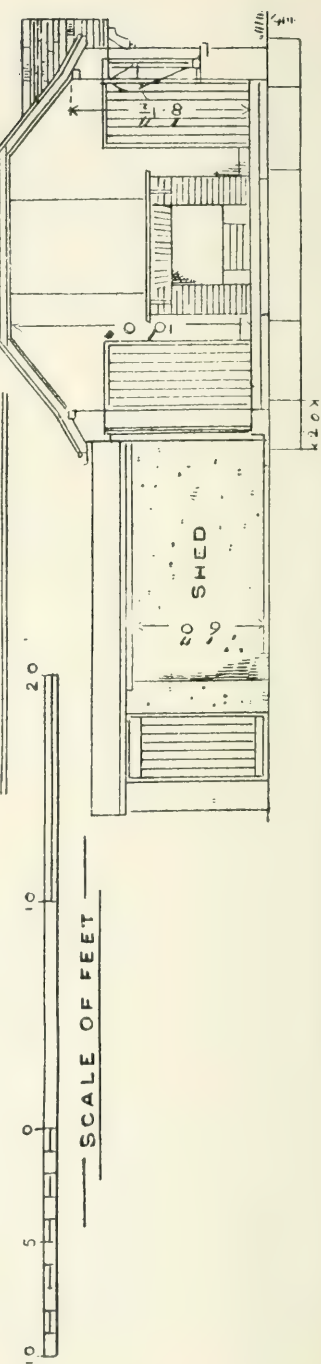
for the labourer and his wife, two other bedroom—one 975 cubic feet, and one 900 cubic feet—for the four other members of the family. A small store-room is also provided.

The 2nd Prize Cottage, which Messrs. H. & J. Martin, Limited, of Belfast and Dublin, have most kindly erected at their own expense, is intended to illustrate a prettier form of design, though a somewhat smaller house. The living-room contains 1,200 cubic feet, and of the bedrooms, the content of one is about 900 cubic feet, and of the two others about 600 cubic feet each. The Cottage is constructed in

FRONT ELEVATION



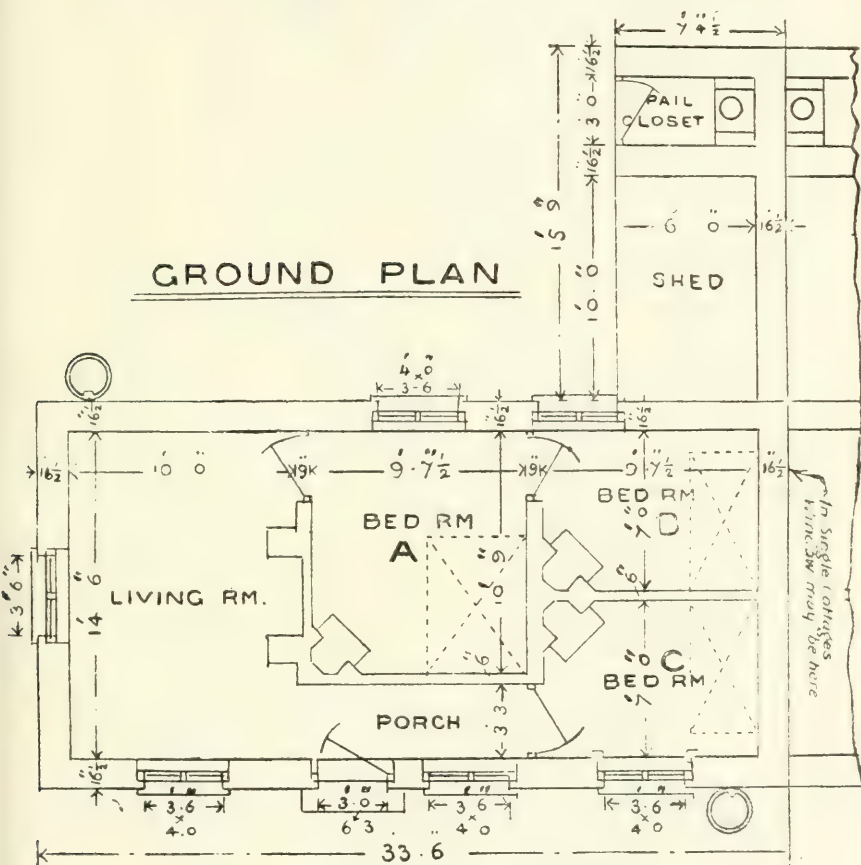
CROSS SECTION



MODEL PLANS FOR LABOURERS' COTTAGES.—DESIGN C.

ordinary concrete dashed outside, and by comparison with the block concrete in the other Cottage, affords an opportunity of contrasting the two forms of concrete construction.

It is much to be regretted that owing to negotiations having fallen through at the last moment with a firm of

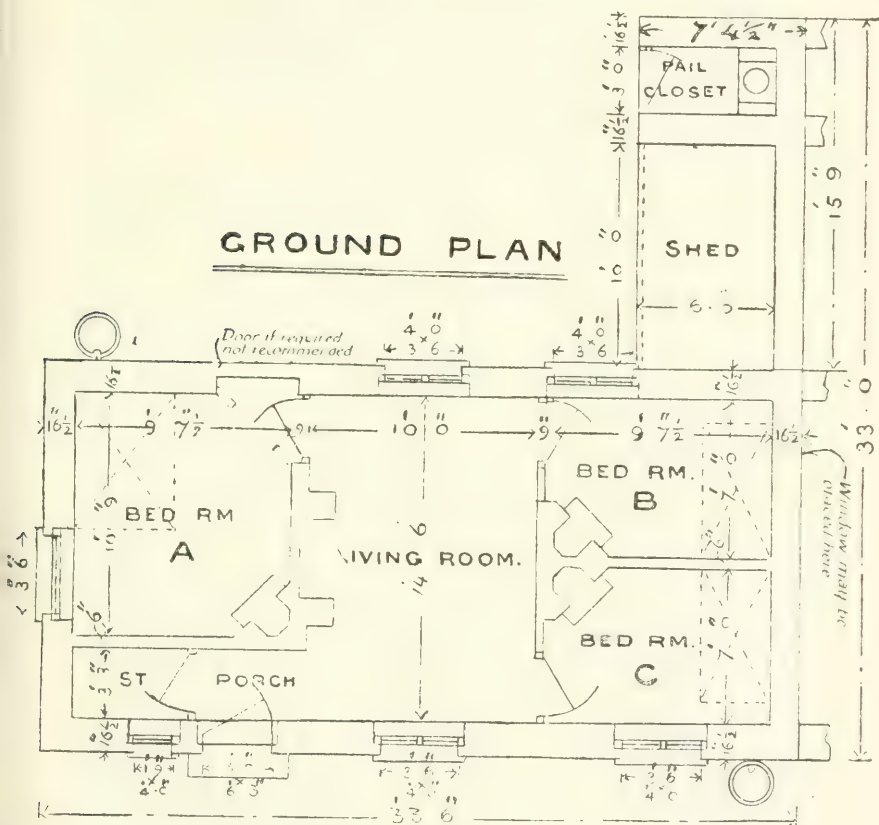


GROUND PLAN OF DESIGN C.

builders who had agreed to construct a third cottage, designed by Mr. F. J. MacCabe, C.E., of the Local Government Board, for the Committee, we have been unable to give an example of what we consider to be a very suitable cottage, possessing some special features with regard to accommodation and ventilation. The design of this cottage will, however, be

found in the model plans published by the Local Government Board, design E.

In a country in which pulmonary consumption is so prevalent as it is in Ireland, the importance of proper lighting and ventilation cannot be exaggerated. We would, therefore, be glad to see the form of window in Mr. MacCabe's Cottage



The 1st Prize Cottage is after a design by Mr. Sidney Moss, Rockbank, Eccles, Manchester; the 2nd Prize Cottage after a design by Mr. J. Roseman Burns, 17 Serpentine Avenue, Ballsbridge, Dublin.

The Cottages have been furnished by Messrs. Millar & Beatty, Grafton Street, Dublin.

A Memorandum is appended issued by the Local Government Board to Rural District Councils, dealing fully with the question of construction of Labourers' Cottages under the Labourers (Ireland) Act, 1906. Copies of the Local Government Board Model Plans are exhibited in each of the Cottages in the Home Industries Section.

MEMORANDUM

In relation to the Model Plans and General Specification for Labourers' Cottages issued by the Local Government Board for Ireland.

OBJECT AND ORIGIN OF PLANS.

1. In the selection and preparation of the plans the object kept in view has been to secure at a moderate cost healthy houses with sufficient accommodation for a family. The plans include four—A, B, C, and D—which were adjudged the best of a great number submitted in competition, and four other plans—E, F, G, and H—prepared in the office of the Local Government Board after a careful consideration of the numerous designs which have been in use since 1883, in the light of the experience gained by members of the Board's staff while inspecting cottages erected and in course of erection.

CUBIC SPACE OF ROOMS.

2. In deciding the size of the houses which it is necessary to provide for rural labourers in Ireland regard should be paid to the fact that the average number in an agricultural labourer's family is about five persons. The average labourer's dwelling should therefore be provided with four rooms, viz., a living room, or kitchen, and three bedrooms.

In a four-roomed house the principal bedroom should have a cubic capacity of not less than 900 cubic feet, and the other bedrooms should contain from 600 to 800 cubic feet each. The living room should contain from 1,200 to 1,400 cubic feet, preferably the latter.

The model plans have been prepared to indicate how suitable accommodation may be provided in buildings with minimum outside dimensions; but as it is not necessary to adopt only one plan for all the houses in a large scheme, and as it may be desired to erect houses varying in size, the plans have not been made uniform as to accommodation.

PRIMARY CONSIDERATIONS.

3. The undue prevalence of pulmonary tuberculosis (consumption), bronchitis, and other diseases of the respiratory organs, as well as diseases, such as rheumatism, associated with a damp climate, render it desirable, and indeed imperative, that particular care should be taken :—

(a) To select suitable sites for cottages on ground which is naturally dry, or which is capable of being easily drained, and with a slope towards the south or south-east.

(b) To construct the houses very carefully with suitable materials, so that they may be proof against damp.

(c) To provide for effective ventilation and heating, and for free drainage from the premises to a suitable outfall.

VENTILATION.

4. Ventilation is of the greatest importance, especially in small houses, and markedly affects the incidence of some of the diseases above noted. A fireplace should therefore be provided in each room, not only for its primary purpose, but also because it is one of the most satisfactory means of ventilation. The plans also show various forms of windows and simple arrangements specially designed to promote the free circulation of air. Tobin tubes or Sheringham valves may be used as good forms of inlet ventilators; and the windows shown on plans A and E, which are divided into two parts, the upper and smaller portion being made to open in hopper form, may be adopted with advantage for any of the designs of cottage. With such windows ventilation can be safely secured, by night or day, without opening the lower or main part of the window, which is of casement form. A simple arrangement of deep beads at the bottom of a window for the introduction of air between hung sashes is illustrated by one of the drawings. Additional outside half-doors are of much value; as they allow the main-door to remain open, and thus afford ventilation without discomfort during the day, and permit a free supply of air, which is frequently necessary to secure a good chimney draught.

GOOD CONSTRUCTION.

5. The desirability of utilising local materials and labour, as well as of minimising the probable cost of maintenance by simple sound construction, has been carefully kept in view.

To secure the lowest outlay for maintenance a simple design and sound work are necessary. A brick in a chimney shaft, which costs (say) 2d. when first set, will cost many times that amount to re-set if it becomes displaced as the result of careless workmanship.

WALLS.

6. The plans and general specification provide for the construction of walls in a variety of ways, including :—

(a) Masonry walls, which should be at least 18 inches thick when plastered.

(b) Solid brick walls, which should be of a minimum thickness of 14 inches, except when cement plastered on the outside, in which case the brickwork may be only 9 inches thick. The latter construction is not recommended for exposed situations.

(c) Hollow brick walls 11 inches thick, which, if carefully built, need not be plastered.

(d) Concrete walls formed *in situ*, which should be at least 10 inches thick, exclusive of external cement plastering, which is necessary with such construction.

(e) Concrete block walls, which may be only 10 inches thick, and do not require external plastering, if carefully set in good mortar and cement pointed.

In many parts of Ireland the careless use of limestone or other dense stone in the walls of houses cause trouble, on account of the passage of water through joints which are not properly filled with mortar, and also on account of condensation when the inner surface of the walls is not well plastered. It is, therefore, of great importance that care should be taken in the use of such materials to avoid this trouble, by filling the joints well, grouting each course thoroughly, and plastering the inner surface of the wall with good plaster.

CONCRETE CONSTRUCTION.

7. Where good building stones or bricks are not readily available, concrete construction may, in many cases, be used with great advantage and economy. Good results, however, cannot be obtained with concrete walling, unless it is made with great care. Considerable skill is required to erect the frames or moulds in which concrete walls are formed *in situ*, that is, in a large mass : and the selection of materials, and

the mixing and disposition of the concrete, are matters calling for experience and good judgment on the part of the workmen, and close inspection on behalf of the Rural District Council. An inherent defect of thin concrete walls formed *in situ* is their great liability to expansion cracks.

Concrete block work is claimed to obviate many of the disadvantages found with concrete walls formed *in situ*, and its use, though comparatively novel, is well worthy of consideration in connection with the building of Labourers' Cottages. In this system concrete blocks, of handy size or building and partly hollow, are formed in simple hand-worked machines of portable size : and the blocks come from the machine either with a finished surface on both sides, or with a rough inner surface for plastering. Sills, lintels, &c., may be made in a similar manner, and the use of relieving arches and of cut stone thus avoided.

Under certain circumstances, where sand and other necessary materials can be readily obtained, the adoption of this system might be expected to lead to considerable economy in construction ; but it should be carefully noted that, to secure satisfactory results, all concrete work requires strict and constant supervision.

FIREPLACES AND FLUES.

8. Particular care should be given to the specification of the kitchen or living-room fireplace and the size of flues, so that these may be provided in accordance with local requirements. It is desirable that special detail drawings of the fireplaces should be prepared in cases where it is proposed to have unusual dimensions or an unusual form ; and the flues should in all cases be built by skilled workmen, as, without great care in construction, it is difficult to secure a good draught with short chimneys.

COST OF ERECTION.

9. It is to be expected that the cost of erecting cottages of the same design will vary considerably throughout the country, and even in the same district, on account of local conditions as to the supply of materials and labour ; but the cost should not anywhere greatly exceed fourpence per cubic foot, as the buildings are of a very simple character, and do not require many of the appurtenances which are necessary in towns. The Local Government Board are of opinion that, with careful selection of design and materials, the cottages may, except under unusually unfavourable conditions, be built at a cost not exceeding £130 each.

EXECUTION OF CONTRACTS.

10. It appears desirable to draw attention to the necessity of providing for the careful supervision of the work of building labourers' cottages, and for the prompt execution of contracts. Competent local tradesmen should be encouraged to take contracts for the work, but care should be taken not to entrust it to persons lacking in experience, energy, or capital. In districts where there are few building contractors, the Rural District Councils might be well advised in seeking tenders from leading firms of contractors who might be expected to carry out the work promptly and thoroughly, and at a moderate rate per cottage, if they were entrusted with the erection of a considerable number of cottages at the same time.

ESSENTIAL REQUIREMENTS.

11. Some essential requirements are :—

- (1.) A dry site and good aspect for each cottage.
- (2.) External walls finished at least 10 inches thick, and a warm weather-tight roof of strong and durable construction.
- (3.) A clear height of rooms on ground floor of at least 8 feet, and on upper floors a height of not less than 4 feet at the wall, and an average height of at least 7 feet.
- (4.) The cubic capacity of the kitchen or living-room to be not less than 1,200 feet, one of the bedrooms to have a cubic capacity of at least 900 feet, and no bedroom to have a smaller cubic capacity than 600 feet.
- (5.) Windows of ample size, with a total area equal to about one-twelfth of the floor area, and each made to open easily at top and bottom for ventilation.
- (6.) Strong smooth floors which can be thoroughly cleaned by washing, with boarding in bedrooms.
- (7.) Sanitary accommodation at least 10 feet from the house. A pail or earth closet is the best form and is much to be preferred to a privy.

Labourers Department,
Local Government Board,

24th June, 1907.

The Housing of the Irish Artizan.

By ROBERT BROWN.

NOT one in ten thousand manufacturing firms knows that the recent Labourers Act (Ireland), 1906, is an enormous State subsidy to the furthering of Irish industries.

This Act empowers the Rural District Council to provide all manual workers earning under 15s. weekly with comfortable four-roomed cottages, and from half to one acre of land. As the State provides the money at £2 2s. per cent. (which includes a sinking fund repaying the loan in 68 years), the



MODEL ARTIZAN'S DWELLING AT DONAGHMORE.

local authority can let these houses at 1s. 3d. to 1s. 6d. per week, without present loss (and at the end of 68 years have the rents to reduce their rates). Or, to put it another way, they can lay out £10 10s. for each 1d. per week of rent they receive. A house and site costing £168 can be let without loss at 1s. 4d. per week. The local authority have power to acquire suitable sites at *agricultural* value, without any extra payment for its compulsory acquisition. The Act also gives them a valid title without legal expenses. All that the artizan has to declare in his application is, that no thoroughly sanitary dwelling is available for him at a convenient distance from his work.

As the ratepayers become the landlords, it is natural to suppose they will do all they can to encourage the industry which employs their tenants, without which the houses would be thrown on their hands. Should labour disputes arise, they will, in their own interest, act as peacemakers.

Fifteen shillings per week may seem very low wages to English employers, but it is very much above the rates paid in most country districts in Ireland.

The average agricultural wage in Ireland is 10s. 7d.; England and Scotland, minimum average, being 14s. 6d. and 13s. 7d. respectively. That of Co. Down, which is raised by its proximity to Belfast, and is the highest in Ireland, is 13s. There are many districts where men are willing to work for 8s. per week.

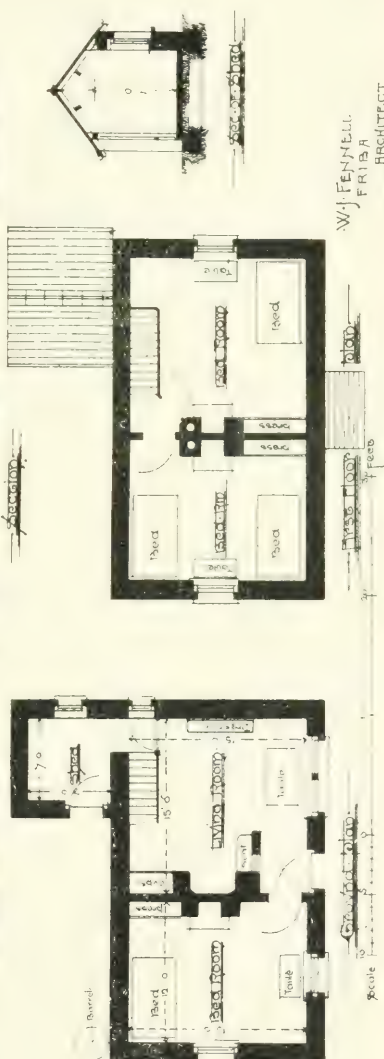
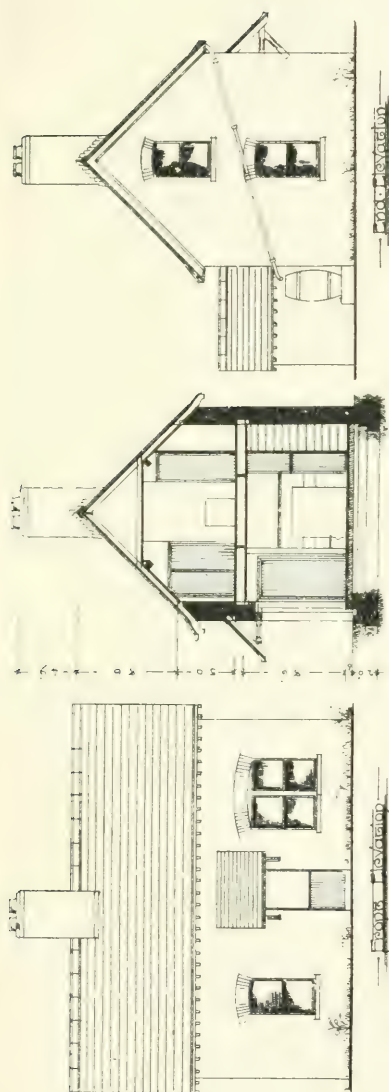
It must be remembered, however, that the garden far more than pays the whole rent, and a great deal of money can be made by the worker from pigs, fowl, etc.

The Act restricts the amount that the authorities may spend on building each house (exclusive of the land) to £130. In districts where building materials are dear, it is not possible to build as comfortable a house as one would like to see at this figure. Had another £20 per house been expended on them, it would have been well spent money, and would have added less than 2d. per week to the rent. However, it would be quite possible for a manufacturer, who realised what a boon to his workers (and so to himself) good houses would be, to take the contract for the building of these cottages himself, employ a clerk of works to supervise the work, and spend upon the houses the profit an outside contractor would expect to make. He might even lose something on the job with ultimate gain to himself. The local authority in Donaghmore intend to build 15 cottages for the men employed in the soap works there, and the directors hope to get the contract for these, and to make them, not merely more roomy and comfortable, but more picturesque.

The advantage of this Act to the manufacturers is not merely the supplying of money at one-third the rate that any ordinary investor would consider a fair return from such property, but the land acquired is in the immediate vicinity of the village.

Where else but in Ireland does the State provide a "Garden City" for each new manufacturer, and pay two-thirds of the rent of all his employees!

This should assist in putting an end to the abominable "factory row" so universally seen adjacent to Irish country mills and factories, where you have all the disadvantages of town with none of the benefits of the country.



W. FENNEL
FRISA
ARCHITECT
BELFAST

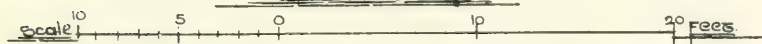
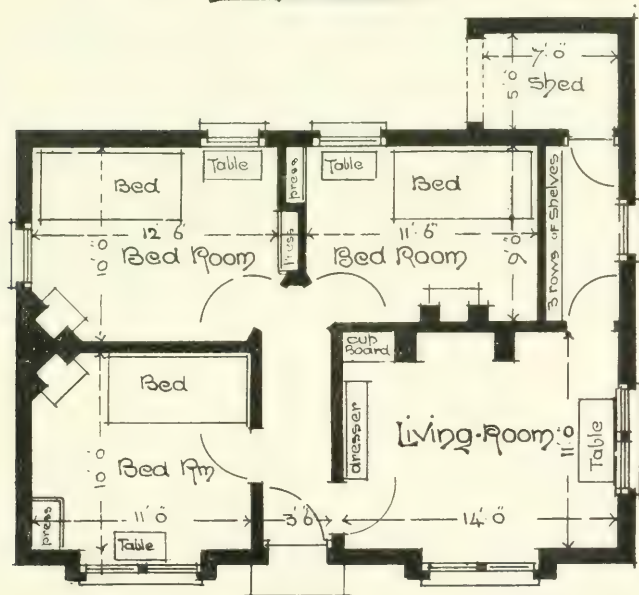
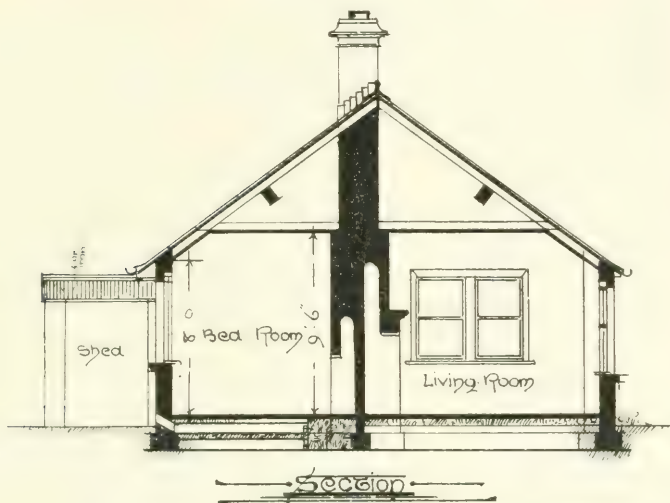
IDEAL ARTIZAN'S COTTAGE.
(2 STOREYS.)

One hopes to see the building of such rows prohibited, and the people spread over the land around our small towns. Anyone who wishes to see a town growing 'as it should not' has only to look out of the railway carriage as he passes our northern towns; he will see rows of workmen's houses being put up with no more ground about them than if they were in the centre of Belfast. This although for miles round is as fine building ground as it is possible to desire, which is not worth more than 30s. per acre for farming.

With regard to the cottages themselves. First, these should be entirely detached. The saving in building them in pairs is very small if the cost of dividing one yard from the other be taken into account. The disputes with neighbours over trespass of fowl, or quarrels among children are avoided. Besides it enables the rooms to be ventilated and lighted better. Very few people, or even architects, have read the Report of the Royal Commission on Ventilation, which was issued four or five years ago; yet the results of that enquiry are most remarkable. It was found that the walls of an ordinary house are wonderfully porous, so that when all the openings into a room were closed as thoroughly as practicable, the entire air was changed in from 2 to 4 hours, according to the strength of the wind. This explains why they found that large rooms were generally worse ventilated than small ones, there being much less wall area in proportion to the cubic contents.

The dweller in an ordinary row or terrace is obliged to breathe the vitiated air from the unventilated room of his neighbour; it passes readily through the brick wall that separates them. When will we learn that perfect health is our most important earthly possession, and forbid the erection of houses which make it impossible? The single storey cottage which I illustrate is, of course, rather more expensive than those to be seen in the Exhibition Grounds, and, therefore, beyond the figure the law authorizes. It is, however, so much more comfortable, with its little hall from which all the rooms open, that many a manufacturer would pay the extra cost to secure such for his employees. Below, however, I suggest a way of cheapening it that may bring it within the reach of all. If, however, the usual materials only can be used, the double-storey type may be employed, as this is without doubt cheaper.

I think these drawings explain themselves. The central door with a screen wall (with little window) gives a very cosy fireside. When the door is opened the draught cannot reach anyone at the fire. The stairs at back are lighted by a window and are sheeted, and a door shuts them

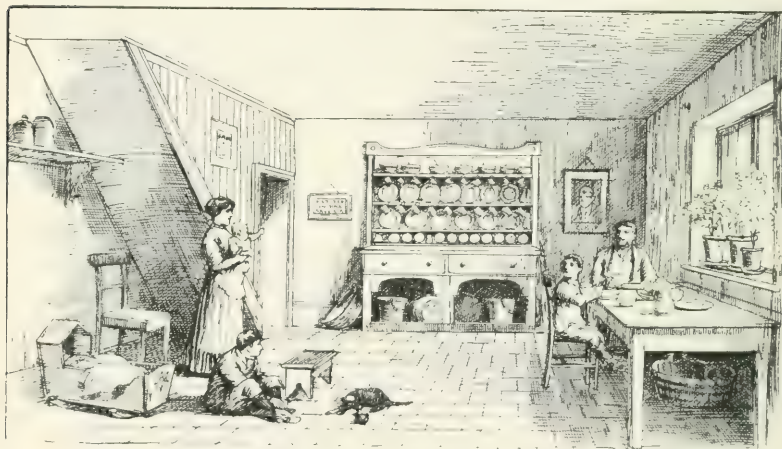


IDEAL ARTIZAN'S COTTAGE.
(1 STOREY.)

W. FENNELL
F.R.I.B.A.
ARCHITECT.
BELFAST

off from the kitchen ; so that if three or four neighbours come in for a smoke the family need not breathe this all night, nor need they keep the bedroom windows shut to prevent the draught down the stairs. Each bedroom is separately entered at head of stair.

Through the door at foot is another entering the shed, which, by putting in a window and door is converted into a scullery. Bedroom slops do not need to be carried through the kitchen, and there is a handy place to store cans, tubs and pots. This encourages tidiness, a thing we lack in Ireland. It is not desirable to build two-room cottages, for if a young married couple get into one they will stay when they have five or six children. Yet small houses for old couples are



INTERIOR OF ARTIZAN'S COTTAGE (A).

often needed. By closing the door into kitchen, the scullery and upper storey could be let as a separate house.

All ceilings are plastered, and the corners are rounded. This costs nothing extra, and leaves less room for dust to gather. I regret to see cottage ceilings being boarded. It costs as much as plaster, does not look as well, and the crevices for dust make it insanitary. No matter what deadly disease may have been in a plastered cottage, it is perfectly safe if it gets a coat of whitewash ; but sterilisation of a cottage with boarded ceilings is impossible. With consumption so rife this is most important.

I hope our Boards will avoid the English casement. It cannot be opened in windy or wet weather or rain will beat in. A tramp can easily open it full if it is open at all, and the

hinges and fasteners give trouble. The hung sash is Irish, and suits our climate. It can be opened less or more in all weathers. This is of the utmost importance in checking consumption.

Every cottage should have the half-door, an admirable and purely Irish idea.

I would strongly urge that instead of building close to the main road, exposed to all the dust and the danger of the children getting out on it and being run over, the houses should be at least half way down the plot, with a path along one side, and no matter what way the road runs the house should face south. In North China, where fuel is dear, this is the invariable rule; they say, "the sun's heat costs nothing."



INTERIOR OF ARTIZAN'S COTTAGE (B).

The chief cost of the one-storey type is the larger roof. How can the cost of this be reduced?

I have long thought that thatch is one of the best roofs for a house. It is warm in winter, cool in summer, and, being porous, allows fresh air to pass through without draught. It is most picturesque, and lends itself to variety in architecture, as it is easy to have dormer windows, hips and valleys: no cutting of slates or tiles being needed or lead gutters. It is also the cheapest roof in first cost; but, alas, the cost of repairs makes it, in the long run, far the more expensive.

This has turned my thought to methods of protecting it from decay, and I am pleased to say I have succeeded quite beyond my expectation. I took a sheaf of wheat last

November and divided it into four parts. One part I steeped in a 4 per cent. solution of copper sulphate, drained this off and treated the straw with a dilute solution of washing soda. In fact I made potato spraying mixture in the cells of the straw.

A second part was treated with 2 per cent. copper solution ; the rest, untreated, was divided in two, with a view to rotting them if possible. I put equal quantities of the two treated and the untreated straws in three separate earthenware vessels full of water, to which some manure water was added. All three were kept for six months in a warm room in our works. At the end of that time I found the untreated straw rotten, while that which had 4 per cent. copper seemed as good as ever. To get accurate information I tested the weight which three straws would sustain before breaking, and append the average of six tests in each case. I may say the weights came wonderfully close in each of these tests.

I also tried the original straw to see what its breaking weight was.

Original Straw ..	..	breaking weight	24 lbs.
With 4 per cent. copper ..	..	„ „	22 „
With 2 per cent. copper ..	..	„ „	15½ „
Unprotected ..	..	„ „	6¾ „

From this I conclude that by this simple method a thatch roof can be made practically imperishable. Only the butt-end of the straw need be steeped, as being the only part exposed to the weather. It is much easier to thatch with the wet straw than with dry, so the labour entailed is very small.

The manufacturers of McClinton's Soap have erected an old type Irish cottage in the Dublin Exhibition Grounds, the roof of which was treated with straw prepared in this way. The building is 40 by 16, and required about one ton of straw, which is a light coat. The cost of copper and soda was only 10s.

On receipt of a post-card, I shall be happy to send a more detailed account. Thatch is, of course, more inflammable than slates, but in this country one almost never hears of a thatched cottage being burnt. I am hopeful, however, of finding a means of making it non-inflammable, but some time will be required for experimenting in this direction.

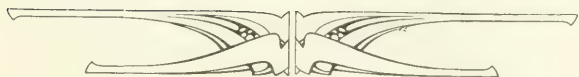
Ceilings can be put up in such a cottage very cheaply, by covering light wooden frames with scrim, to which paper can be pasted.

The use of this rot-proof thatch on cottages may not be approved. How then can the cost be reduced? I think

by the use of cement tiles. These can be coloured a deep red, are so constructed as to be more water-tight than ordinary tiles, and no heavier than slates. Where clean sand and very fine gravel can be had cheaply, and labour is not too expensive, they can be made at one-third the cost of slates.

The future of building is with concrete, and there is reason to think it will be possible to turn out a house with no timber in it, except the windows and doors. Such a house should last as long as Time. This, too, with one-half the amount of cement that is at present used in concrete construction.

I have written the foregoing in the hope that attention will be given to the question of housing in and around our small towns, whereby that scourge, as deadly to our country as tuberculosis, viz.—emigration, may be properly controlled with the facilities aforementioned; districts at present decaying may be revived, labour employed, bright homes raised up, and new money will find its way in, either through Irish manufacturers or through those from across the Channel. If enterprise and capital will combine with cheap and good labour, the days of poverty and *ennui* will soon be replaced by those of prosperity and energy.



Women's National Health Association of Ireland.

THE objects of the Women's National Health Association of Ireland are :—

1. To arouse public opinion, and especially that of the women of Ireland, to a sense of responsibility regarding the public health.
2. To spread the knowledge of what may be done in every home, and by every householder, to guard against disease, and to eradicate it when it appears.
3. To promote the upbringing of a healthy and vigorous race.

HEALTH PROBLEMS FOR CONSIDERATION.

The health problems which have first claimed the earnest consideration of the Association are :—

1. CONSUMPTION.—How an organised effort can be made to stamp out the preventable disease of Consumption, and how the active co-operation of women of all classes can be engaged to this end.

(According to the latest figures furnished by the Registrar-General, sixteen out of every hundred deaths in Ireland are due to Tuberculosis.)

2. INFANTILE MORTALITY.—How to combat the causes leading to Infantile Mortality, which, according to the Registrar-General's latest figures, carries off 95 out of every 1,000 children born in Ireland before they have reached the age of one year.

3. MILK SUPPLY.—How the system of providing and distributing milk can be controlled, with a view to the health both of infants and of the population at large.

(In an agricultural country like Ireland this question is of peculiar importance, and the community at large must be aroused to the necessity of demanding efficient control and inspection of farms and dairies, and of the places where the milk is kept and sold, both in town and country.)

4. SCHOOL HYGIENE.—

(a) How to promote the teaching of Elementary Hygiene and Domestic Science in Primary Schools, and the training of teachers to give instruction in these subjects.

- (b) How to make the general public realise the unsanitary condition under which the children attending many of the National Schools have to pursue their education.
- (c) How to promote the inspection of children in Elementary Schools, by trained district nurses.

(The system whereby trained district nurses visit at stated intervals the Primary Schools in order to attend to any small ailments—cuts, bruises, etc.—and to detect premonitory symptoms of illness, skin disease, or eye and ear affections, has been found of the greatest service in a number of districts where it has been put in force.)

The Inaugural Meeting was held on March 13th, 1907, the Lord Lieutenant taking the chair in the absence of the President, the Countess of Aberdeen, who was ill at the time.

A Provisional Committee was formed to draw up a Constitution and to organise the Association. This Provisional Committee has been working at the task confided to it, with the result that several country branches have already been formed, and active work in the large towns will be started during the coming winter.

Under the auspices of the Provisional Committee preparations have been made for the holding of a Tuberculosis Exhibition, to be first opened in the Home Industries Section of the International Exhibition during the last fortnight of October. This Exhibition will consist of:—

1. Diagrams and Statistics.
2. Pathological and Bacteriological exhibits.
3. Dietary, including Milk Sterilisation, Cooking, etc.
4. Literature, including illustrations from other countries, etc.
5. Appliances and various exhibits bearing on treatment, etc.
6. Veterinary exhibits.
7. Lectures and demonstrations.

Experts are in charge of each of these Sections, and in addition a Consultative Committee has been formed, to which local authorities throughout Ireland, and Medical and other Societies concerned with the question of combating the ravages of Consumption, have been invited to appoint delegates,

This Consultative Committee met on Thursday, August 29th, at Leinster House, Kildare Street, and passed the following resolutions :—

RESOLUTION I. :—" That we, the Members of the Consultative Committee, having had placed before us a statement of the steps taken by the Executive Committee with the object of forming a representative and instructive collection of objects illustrating in a popular manner the subject of Tuberculosis and its prevention, do hereby approve the same, and we hereby pledge ourselves to do all in our power to make this Exhibition a success."—Proposed by Sir Henry E. Swanzy, P.R.C.S. ; seconded by Lord Frederick Fitzgerald.

RESOLUTION II. :—" That we consider it of urgent importance to the welfare of the Nation to elicit opinion and diffuse information as to the best means of dealing with an overwhelming evil which is destroying the vitality of our people; and that this Meeting desires to draw attention of local public bodies, and of philanthropic organisations in Ireland to the educative value of the forthcoming Exhibition, and recommends that steps should be taken to bring visitors to inspect it, and that arrangements should be made to take it to different parts of the country."—Proposed by Dr. W. Calwell, Belfast ; seconded by Mr. P. J. O'Neill, Dublin.

After the close of the Exhibition it is proposed that the Tuberculosis Exhibition shall visit various parts of Ireland, in the same way as similar Exhibitions have been sent on tour in Germany, the United States of America, and Canada, with marked beneficial results.

Skilled demonstrators will be in attendance during the Exhibition to show the microscopic and other medical exhibits to visitors.

Literature bearing on Tuberculosis, and how to combat it, will be distributed, and a scheme of short lectures, some of them illustrated by lantern slides, is being drawn up.

It is earnestly hoped that those interested in the question fraught with so much importance for Ireland, will bring as many visitors as possible to the Exhibition, and will also strengthen the hands of the Women's National Health Association of Ireland in its task of arousing public opinion by practical support.

Those desirous of joining the Association, or of obtaining further information or sending contributions, should communicate direct with H. E. the Countess of Aberdeen, Vice-regal Lodge, Dublin.

IRELAND.

Industrial Development Associations

Marked thus ☐

Chambers of Commerce.

Marked thus C

Showing Location
of

Chambers of Commerce.

Industrial Development Associations.



Chambers of Commerce and Industrial Development Associations.

THE Map on the opposite page shows where there are located Chambers of Commerce and Industrial Development Associations, and it will be noticed, as regards the latter, that it is in the southern portion of the country the latter organisation is spreading. This is, no doubt, due partly to the fact that the pioneer Association was founded in Cork after the Exhibition in that city in 1902.

The objects of such Associations may be gauged by those ruling in Dublin, viz. :—

To promote the sale of Irish manufacture and to encourage local Industries—

1. By persistently urging upon the public the duty of giving a preference to Irish manufactures.
2. By encouraging local manufacturers to advertise more generally.
3. By impressing upon shopkeepers the national and economic importance of retaining money and labour in Ireland through encouraging the sale of Irish goods.
4. By urging the wholesale houses to stock and push the sale of Irish goods, and to encourage their travellers to keep samples of home-made articles well to the front.
5. By investigating complaints and doing everything possible to promote good feeling between manufacturers, distributors, and the public.
6. By exposing cases of fraud or misrepresentation, such as selling foreign goods as Irish, or any other unfair methods calculated to injure Irish trade.

Which objects are to be carried out by every legitimate means which circumstances may from time to time suggest.

One outcome of the formation of Industrial Development Associations has been the establishment of an Irish Trade mark, and which is now in use on various manufactures. The design is a Celtic one, bearing the words

"DÉANTA I n-ÉIRINN."

HOME INDUSTRIES SECTION.

President :

HER EXCELLENCY THE COUNTESS OF ABERDEEN.

Committee :

THE COUNTESS OF MAYO.

T. W. RUSSELL, M.P.

SIR HORACE PLUNKETT,

K.C.V.O.

W. M. MURPHY, J.P.

DR. T. J. STAFFORD, C.B., D.L.

R. A. ATKINS, J.P.

W. J. D. WALKER.

MAX S. GREEN.

LADY MACDONNELL.

MRS. EVERARD.

REV. P. J. DOWLING, C.M.

JAMES TALBOT-POWER, D.L.

GEORGE FLETCHER, F.G.S.

JOHN EDWARD FOTTRELL.

W. T. MACARTNEY-FILGATE.

IN determining the scope of the Exhibition generally, the Executive Committee decided to erect and equip special buildings, and give inducements to Industries of a rural nature, which could not afford to pay for space, but which, with free facilities, would be enabled to make a display creditable to Ireland and themselves.

Similar inducements were extended to such small undertakings as would be able to make headway, if so assisted.

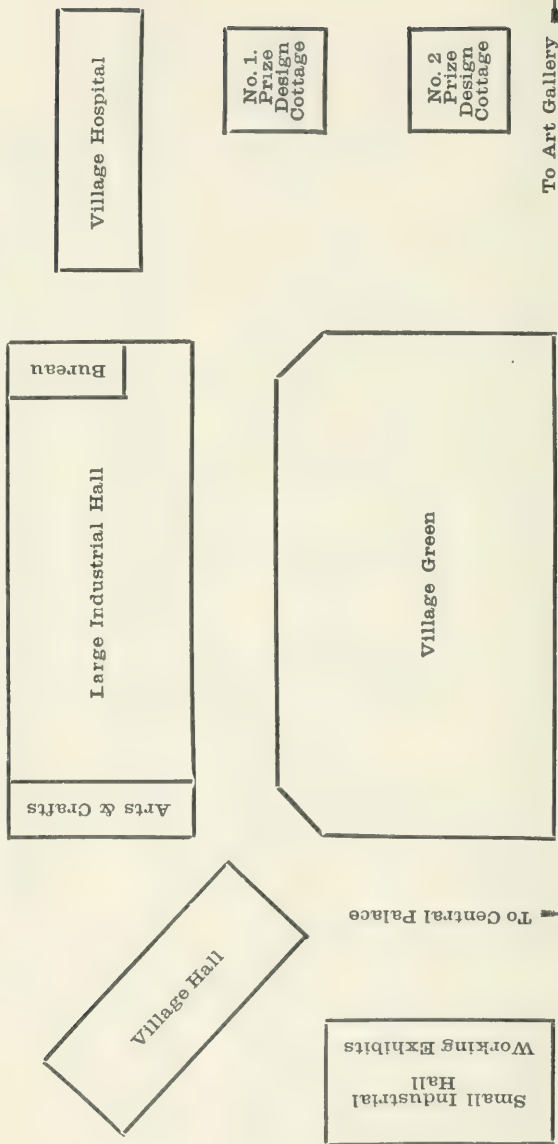
Her Excellency the Countess of Aberdeen was invited and consented to preside over the Section, aided by a Committee conversant with requirements.

It was realised that all branches of rural economy should, as far as possible, be included, and accordingly there have been added a series of working exhibits representative of such industries as are carried on with commercial success in Ireland, together with others which might be introduced, and afford a living wage should they be hereafter adopted. Some of these are hand-power, while others have electric power applied, it being considered a proper occasion to introduce small motors for industrial purposes, power being now available at a cheap rate by means of Gas Producer plant, for which Castlecomer coal has been proved suitable, or with an oil engine, reserves of oil being located in most parts of the country.

A display is made of Pottery, which could be manufactured from Clays existing in various Irish counties, and which have been tested and proved suitable for such wares.

Leather, Skins, and Fur are shown, with possible manufactures therefrom ; articles from Horn and Bone being also included.

PLAN OF HOME INDUSTRIES SECTION.



Tobacco culture, which has lately been revived in Counties Meath, Louth, Kilkenny, Wexford, and King's Co., is represented by a collective exhibit from these counties.

A series of photographs, showing home workers in other countries manufacturing goods for the markets of the world, are displayed, with a view of drawing attention to possibilities in Ireland.

The manufactured goods in the Large Hall comprise :—
Linen, in all branches, executed by workers in their own houses.

Embroideries, both white and art.

Woollens, comprising Homespun and Tweeds, Blankets, Rugs, Flannels, and Serges.

Carpets and Rugs, hand-tufted.

Hosiery, hand and machine made.

Shirts, Blouses, Frocks, and Underclothing.

Lace and Crochet of every description, manufactured in Ireland.

Straw Hats.

Leather Gloves.

Cutlery.

There has also been embodied an Arts and Crafts subsection, organized by the Earl of Mayo, it being desirable that individual designers and workers of high merit should be afforded a chance to demonstrate talent. Here will be seen fine specimens of every branch which comes under the heading of Arts and Crafts.

A Village Hall, a Village Hospital, two Model Labourers' Cottages with a Village Green, complete the Section.

The Village Hall has been built and equipped to meet requirements in the rural districts, and is intended to act as a model for those seeking suggestions.

The Village Hospital has been planned and furnished in accordance with most modern requirements. Therein the work of Lady Dudley's District Nurses, in the poorest parts of Ireland, is shown by means of photographs.

The Model Cottages have been erected according to designs approved by the Local Government Board. Sanitary requirements have been carefully considered, and the buildings furnished on a scale in harmony with the cost of the buildings. Finally, the Village Green has been laid out with a view to having competitions thereon.

The foregoing synopsis will convey to visitors the desire of the Committee to form a display creditable to Ireland, and useful to those engaged in the work of rehabilitating rural life, thereby bringing work and leisure properly together, and tending to stay the tide of emigration.

IN LARGE HALL.

CLASS I.—LINEN, EMBROIDERY, SPRIGGING,
DRAWN THREAD, & MOUNTMELICK WORK.Catalogue
No.

- 1 COMPLETE DISPLAY of hand-woven Linens, Damasks and Cambric, Embroidered and Drawn goods from the Counties Antrim, Armagh, Down, Londonderry and Donegal, organised by Mr. W. R. McMurray, J.P., Belfast.

CONGESTED DISTRICTS BOARD FOR IRELAND.

- 2 Drawn Work and Embroidery Class, Ardara, Co. Donegal.—White Embroidery.

Co. ANTRIM :—

- 3 Thomas Bankhead, Ballymontra, Ahoghill.—Handloom fine Linen, Shirts and Collars.

Co. CARLOW :—

- 4 Garryhill Industry, Garryhill.—Embroidery, Drawn Work and Sprigging.

Co. CLARE :—

- 5 “Clare Embroidery” Industry, Ballyalla, Ennis.—Embroidery and Smocking.

- 6 East Clare Embroidery Class, Scariff.—Embroidery and Smocking.

Co. DERRY :—

- 7 South Derry Cottage Industry, Bellaghy.—Embroidery.

Co. DONEGAL :—

- 8 Drumbeg Industry, Mount Charles.—Embroidery and Greek Lace.

- 9 Brownhall Cottage Industry, Ballintra.—White Embroidery and Pipers’ Banners.

Co. DONEGAL TECHNICAL INSTRUCTION COMMITTEE :—

- 10 Letterkenny Sprigging Class.—Embroidery.
- 11 Malin Sprigging Class.—Embroidery.
- 12 Clonleigh Parish Sprigging Class.—Embroidery.
- 13 Drumbologue Sprigging Class.—Embroidery.

Co. DOWN :—

- 14 John Crosbie, Donaghadee.—Hand Veining and Embroidery.
- 15 Strangford Lough Industry, Strangford.—Embroidery and Drawn Thread Work.
- 16 Co. Down Agricultural and Technical Institute, Lisburn.—Embroidery.

Catalogue
No

Co. DUBLIN :—

- 17 Loreto Abbey, Dalkey.—Embroidery.
18 Royal Irish Industries Association, 76 Grafton Street,
Dublin.—Embroidered Robes.

Co. FERMANAGH :—

FERMANAGH COUNTY COMMITTEE OF AGRICULTURE
AND TECHNICAL INSTRUCTION :—

- 19 Cashelnadrea Sprigging Class, Kiltyclogher.—White
Embroidery.
20 Brallagh Sprigging Class, Belleek. —White Embroidery.

KING'S Co. :—

- 21 Moneyguineen Home Industries Society, Birr.—Em-
broidery and Smocking.

Co. MEATH :—

- 22 Co. Meath Home Industries Society, Navan.—Drawn
Work and Embroidery.

QUEEN'S Co. :—

- 23 Industrial Association, Mountmellick.—Mountmellick
Work.
24 Abbeyleix Work School.—Embroidery.

Co. WESTMEATH :—

- 25 St. Anne's Industry, Kilbeggan.—Embroidery.
26 Turbotston Cottage Industry, Coole.—Embroidery.

Co. CORK :—

- 27 Crawford Municipal Technical Institute, Cork.—Em-
broidery.

CLASSES II. and III.—HOMESPUNS.

(Hand-made goods made from hand-spun yarn).
(Hand-woven goods made with mill-made yarn).

Co. ANTRIM :—

- 28 Co. Antrim Hand-Loom Industry, Ahoghill.—Home-
spuns.

Co. DONEGAL :—

- 29 Donegal Cottage Industry, Neil McNelis, Ardara.—
Homespuns.

Co. GALWAY :—

- 30 R. H. McKeown, Leenane, Connemara.—Homespuns.
31 Convent of Mercy, Gort.—Colleen Cloaks.
32 Royal Irish Industries Association, 76 Grafton Street,
Dublin.—Claddagh Cloths.

Co. KERRY :—

- 33 Joseph Mansfield, " The Spinning Wheel," Kenmare.—
Homespun.

- 34 P. J. O'Shea, Cahirciveen.—Homespun.

Co. LIMERICK :—

- 35 Thomas O'Brien, Clareglan.—Homespun.

Co. MAYO :—

- 36 Castlebar Homespun Tweed Industry, Castlebar.—
Homespun.

QUEEN'S Co. :—

- 37 Paul Kenna, Ballinakill Flannel Industry.—Flannels.

CLASS IV.—TWEEDS, etc. (Machine-spun and woven).

Co. CORK :—

- 38 Thomas Copithorne, Bantry Woollen Mills, Bantry.—
Tweeds and Costume Cloths.

Co. KERRY :—

- 39 Robert Eadie & Sons, Kerry Woollen Mills, Beaufort.—
Blankets, Rugs and Tweeds.

Co. TIPPERARY :—

- 40 J. Hanly, Ballyartella, Nenagh.—Tweeds and Flannels.

Co. WATERFORD :—

- 41 C. J. Sheehan & Sons, Woollen Factory, Dungarvan.—
Tweeds and Homespun.

CLASS V.—CARPETS AND RUGS.

CONGESTED DISTRICTS BOARD FOR IRELAND.

- 42 Hand-tufted Carpets, representing the goods produced
at Killybegs, Kilcar, Annagry and Crolly, Co.
Donegal, by Messrs. Morton & Co.

Co. KILDARE :—

- 43 Naas Co-operative Home Industries Society, Ltd.—
Hand-tufted Carpets and Rugs (in Arts and Crafts
Sub-Section).

QUEEN'S Co. :—

- 44 The Abbeylax Carpet Factory.—Hand-tufted Carpets
and Rugs (in Arts and Crafts Sub-Section).

Catalogue
No.

CLASS VI.—HAND-MADE HOSIERY.

- KING'S Co. :—
 46 Birr Castle Knitting Industry.—Hand-knitted Goods.
 Co. WATERFORD :—
 47 Curraghmore Knitting Industry, Portlaw.—Hand-knitted Goods.

CLASS VII.—MACHINE-MADE HOSIERY.

- Co. CORK :—
 48 Reliance Hosiery Works, Bandon.—Hosiery.
 49 The Bandon Hosiery Co., Bandon.—Hosiery.
 Co. LONGFORD :—
 50 The Longford Hosiery Co., Longford.—Hosiery.

CLASS VIII.—MAKING-UP TRADE.

- Co. ARMAGH :—
 51 Slievegullion Factory, Mullaghbawn.—Shirts and Pyjamas. (Organised by Hogg and Mitchell, Manchester).
 Co. CARLOW :—
 52 Corres Cottage Industry, Bagenalstown.—Frocks.
 Co. DONEGAL :—
 53 Donegal Shirt Industry. Buncrana.—Linen Shirts and Collars.
 Co. LIMERICK :—
 54 St. Ita's Shirt Factory, Hartstongue St., Limerick.—Flannel Shirts.
 Co. MAYO :—
 55 Convent of Mercy, Castlebar.—Underclothing.
 56 Collective Exhibit, organised by C. Bayer & Co., Londonderry, of Fine Underclothing, from Counties Donegal, Tyrone and Londonderry.

CLASS IX.—LACE AND CROCHET.

TYPICAL LACE CLASSES IN CONNECTION WITH
CONGESTED DISTRICTS BOARD FOR IRELAND.

- 57 Sisters of Charity, Benada Abbey, Tubbercurry, Co. Sligo.—Limerick, Guipure, Appliqué and Crochet Lace, made from the newest designs.
 1st Prize for designs and work at R.D.S. Art Industries Exhibitions, and medals for excellence of design and work at St. Louis and Milan.

Catalogue

No.

- 58 St. Louis Convent, Kiltimagh, Co. Mayo.—Guipure, Appliqué and Crochet Lace in great variety of design and style.
Numerous 1st prizes and medals at R.D.S. and other Exhibitions.
- 59 Lace Class at Glengariffe, Co. Cork.—Guipure, Appliqué and Limerick Lace.
Numerous awards for design from Cork and other Exhibitions.
- 60 Lace Class, Ardara, Co. Donegal.—Fine and Relief Crochet in great variety.
Numerous awards for excellence of work.
- 61 Lace Class, Cliffoney, Co. Sligo.—All sorts of Fine and Relief Crochet.
- 62 Lace Class, Spiddal, Co. Galway.—Crochet produced in great variety.
- 63 Lace Class, Shanacuan, Beaufort, Co. Kerry.—Appliqué and Guipure Lace.
- 64 Lace Class, Pullathomas, Bangor Erris, Co. Mayo.—Every description of Crochet Lace.
- 65 Lace Class, Doohoma, Geesala, Bangor Erris, Co. Mayo.—Fine Crochet a speciality.
- 66 Lace Class, Derrypark, Tourmakeady, Co. Mayo.—Fine and Relief Crochet.
- 67 Lace Class, Dereendaffderg, Ballinrobe, Co. Mayo.—Fine and Relief Crochet.
- 68 Lace Class, Carna, Co. Galway.—Every description of Crochet Lace.
- 69 Lace Class, Tourmakeady, Co. Mayo.—Fine and Relief Crochet.

Co. ARMAGH :—

- 70 Urker Lace Class, Crossmaglen.—Carrickmacress Lace.

Co. CORK :—

- 71 Riverstown Lace Class.—Limerick Lace.
- 72 Cork Industrial Association.—Lace and Crochet.
- 73 Crawford Municipal Technical Institute, Cork.—Limerick Lace and Crochet.
- 74 Blarney Crochet Cottage Industry, St. Anne's Hill, Blarney.—Crochet.
- 75 Convent of Mercy, Queenstown.—Carrickmacross and Limerick Lace and Clones Crochet.
- 76 St. Joseph's Convent School, Kinsale.—Limerick Lace and Clones Crochet.

Catalogue
No.Co. CORK—*continued* :—

- 77 Youghal Co-operative Lace Society. Presentation Convent, Youghal.—Needlepoint Lace and Crochet.
- 78 St. Joseph's Technical Schools, Convent of Mercy, Bantry.—Limerick Lace, Clones Crochet and Embroidered Net.
- 79 South Presentation Convent, Douglas Street, Cork.—Limerick Lace and Rose Point.
- 80 Presentation Convent, Bandon.—Carrickmacross Lace and Clones Crochet.
- 81 Macroom Convent. Industrial School.—Limerick Lace.

Co. CAVAN :—

- 82 Convent of Poor Clares, Ballyjamesduff.—Crochet.
- 83 Convent of Mercy, Cootehill.—Carrickmacross Lace and Crochet.

Co. LIMERICK :—

- 84 Mrs. Vere O'Brien's Lace School. Limerick. —Limerick Lace (Run and Tambour).

Co. CARLOW :—

- 85 Borris Lace Industry.—Borris Copy of Point de Milan.
- 86 Corres Cottage Industry.—Crochet.

Co. DOWN :—

- 87 Strangford Lough Industry, Strangford.—Carrickmacross Lace and Crochet.

Co. DUBLIN :—

- 88 Kilgobbin Lace School. —Carrickmacross Appliqué Lace.
- 89 Cruagh Lace Class, Rathfarnham.—Carrickmacross Lace (Guipure and Appliqué).
- 90 Catholic Institution for the Deaf and Dumb, St. Mary's, Cabra.—Limerick Lace (Run and Tambour).
- 91 Crochet School, Sisters of Charity, Howth.—Crochet.
- 92 Royal Irish Industries Association, 76 Grafton Street, Dublin.—Carrickmacross Laces and Crochet.

Co. DONEGAL :—

Classes under Co. Donegal Joint Technical Instruction Committee :—

- 93 Falcarragh Crochet Class.—Crochet (raised and fine).
- 94 St. Louis Convent (Lace and Crochet Class), Bundoran.—Carrickmacross Lace, Crochet and " Bundoran " Crochet Appliqué.
- 95 Ballyshannon Lace School.—Irish Crochet.
- 96 Ballybofey Crochet Class.—Irish Crochet.
- 97 Letterkenny Crochet Class.—Irish Crochet.

Catalogue
No.

Co. FERMANAGH :—

Classes under Fermanagh County Committee of Agriculture and Technical Instruction :—

- 98 Countess of Erne's Home Industry, Derrylin.—Crochet
- 99 Letterbreen Lace Class.—Crochet (fine and raised).
- 100 Tempo Crochet Class.—Crochet.
- 101 Coonian Crochet Class.—Crochet.
- 102 Moan's Cross Crochet Class.—Crochet.
- 103 Coa Crochet Class.—Clones Crochet.
- 104 Brookeboro' Home Industries.—Crochet.
- 105 Irish Lace School, Convent of Mercy, Enniskillen.—Crochet.

CO. GALWAY :

- 106 Sisters of Charity, Clarenbridge, Oranmore.—Carrickmacross Lace (Guipure and Appliqué).
- 107 Convent of Mercy, Tuam.—Crochet.

Co. KILKENNY :—

- 108 Inistioge Cottage Industry.—Irish Crochet (fine and raised).

Co. KERRY :—

- 109 Presentation Convent, Lace Class, Tralee.—Crochet.
- 110 Convent of Poor Clares Lace School, Kenmare.—Lace (Rosepoint and Needlepoint).
- 111 Presentation Convent, Cahirciveen.—Limerick and Carrickmacross Lace and Crochet.

Co. KILDARE :—

- 112 Monasterevan Lace Industry.—Carrickmacross Lace (Guipure and Appliqué).

Co. LONGFORD :—

- 113 McGoev Institute, Longford.—Carrickmacross Lace (Guipure and Appliqué) and Crochet (raised and flat).
- 114 Convent of Mercy, Granard.—Crochet (Clones point, raised and fine), and Embroidered Net.
- 115 Co. Longford Home Industries, Ballinalee, Lace Class.—Carrickmacross Lace.

Co. LEITRIM :—

- 116 Crochet Industry, Manorhamilton.—Crochet (heavy and fine Clones).

Co. LOUTH :—

- 117 Mrs. T. W. Filgate's Lace Centre, Lisrenny, Ardee.—Flat Needlepoint and Genoise Point.
- 118 Lace Industrial School, Convent of Mercy, Ardee.—Ardee Point Lace Tatting and Carrickmacross.

Catalogue
No.Co. LOUTH.—*continued* :—

- 119 Lace Department, Convent of Mercy, Dundalk.—Carrickmacross Lace and Crochet.
- 120 Castle Bellingham Co-operative Home Industries Society.—Carrickmacross Appliqué Lace.
- 121 Clogher Head Lace Industry.—Crochet (raised and Clones).

Co. MEATH :—

- 122 Co. Meath Home Industries Society, Navan.—Carrickmacross Lace and Crochet.

Co. MONAGHAN :—

- 123 Convent of St. Louis, Monaghan.—Crochet (fine and heavy).
- 124 Collective Exhibit of Irish Crochets from Co. Monaghan, organised by P. Kieran, Ulster Arms, Monaghan.
- 125 Convent of St. Louis, Clones.—Crochet (raised and fine).
- 126 Convent of St. Louis, Carrickmacross.—Carrickmacross Lace (Guipure and Appliqué).

Co. MAYO :—

- 127 Convent of Mercy, Castlebar.—Fine Irish Crochet.
- 128 Convent of Mercy, Westport.—Crochet (raised and fine).
- 129 Ballysokeery Co-operative Home Industries Society.—Carrickmacross Lace (Appliqué).
- 130 Convent of Mercy, Swinford.—Limerick Lace and Irish Crochet.

QUEEN'S Co. :—

- 131 Mrs. Hutchinson Poë's Lace Class, Ballinakill.—" Heywood Point Lace " Crochet and Clones Crochet.

Co. ROSCOMMON :—

- 132 Tisara Co-operative Home Industries Society, Athleague.—Crochet.

Co. SLIGO :—

- 134 Lady Crofton's Point Lace Class, Ballisodare.—Lace.
- 135 Convent of Mercy, Ballymote.—Carrickmacross Lace (Guipure and Appliqué).

Co. TIPPERARY :—

- 136 Presentation Convent, Thurles.—Limerick Lace and Crochet.
- 137 St. Vincent de Paul's Irish Lace Industry, Clonmel.—Crochet (raised and Clones).

Co. TYRONE :—

- 138 Lissan Co-operative Home Industries Society, Ltd., Cookstown.—Clones Crochet.

Catalogue
No.

Co. WEXFORD :—

139 Convent of Mercy, New Ross.—Crochet.

140 Carmelite Convent, New Ross.—Rose Point Lace.

Co. WESTMEATH :—

141 Convent of Mercy, Moate.—Crochet (raised and Clones)

142 St. Anne's Industry, Kilbeggan.—Carrickmacross Lace.

CONGESTED DISTRICTS BOARD FOR IRELAND.

143 Connemara Lace Curtains as made at Carraroe, Lettermore, Gorumna and Kilkerrin, Co. Galway.

CLASS X.—ART EMBROIDERY.

Co. CARLOW :—

144 Dunleckney Cottage Industry.—Coloured Embroidery.

Co. DUBLIN :—

145 Loreto Abbey, Dalkey.—Vestments.

146 Royal School of Art Needlework, 20 Lincoln Place, Dublin.—Art Needlework.

Co. LOUTH :—

147 Embroidery Department, Convent of Mercy, Dundalk.—Vestments.

Co. MONAGHAN :—

148 Convent of St. Louis, Monaghan.—Ecclesiastical Embroideries.

Co. TIPPERARY :—

149 Mrs. Bagwell, Marlfield, Clonmel.—Coloured Embroidery.

CLASS XI.—MISCELLANEOUS.

150 Collective Exhibit of Irish-Grown Tobacco from Counties Meath, Louth, Wexford, Kilkenny and King's, organised by Col. Everard, H.M.L.

150b Irish Made Pipes.—Kapp & Peterson.

Co. LIMERICK :—

151 "Shannon" Mats.—The Hon. M. Spring-Rice, Mount Trenchard, Foynes.—Bath Mats.

Co. WESTMEATH :—

152 Mrs. Pollard-Urquhart, Castle Pollard.—Toys.

Co. WEXFORD :—

153 The Wexford Hat Co., Ltd., Wexford.—Straw Hats and Caps.

Catalogue
No.

Co. TIPPERARY :—

- 154 Tipperary Gloving Industry, Tipperary.—Gloves and Furs (Fownes Bros. & Co., Worcester and Tipperary).

Co. KERRY :—

- 155 J. Mansfield, The Spinning Wheel, Kenmare.—Irish Wools and Dyes used in manufacture of Kerry Homespun.

Co. DONEGAL :—

- 156 Neil McNelis, Ardara.—Irish Wools and Dyes used in manufacture of Donegal Homespun.

Co. GALWAY :—

- 157 R. H. McKeown, Leenane.—Irish Wools used in manufacture of Galway and Connemara Homespun.

Co. DUBLIN :—

Dublin Cutlery Co.—Knives.

- 158 TROPHY OF LEATHER, BONE, HORN, HAIR AND FUR, *showing possible utilization of Irish materials.*

Leather, Horn and Fur, organised by Mr. R. D. Hegarty, 124 Bermondsey Street, London.

Shaving and Tooth-brushes, displayed by Edwards Bros., Manufacturers, 63 St. Paul's Road, Highbury, London.

- 159 TROPHY OF POTTERY, *showing possible utilization of Irish Clays, which have been satisfactorily tested in Ulster, Munster, Leinster and Connaught.*

The specimens on top of pyramid are "Della Robbia" ware and are made of Irish clays by Harold Rathbone.

The specimens of Belleek ware are lent by the Belleek Pottery Co.

The foreign goods capable of production in Ireland were collected by Wilton P. Rix, Pottery Expert.

- 160 COLLECTION OF ARTICLES MADE IN "THE HOME" *in other countries, which are imported into Ireland and could be made in the country.*

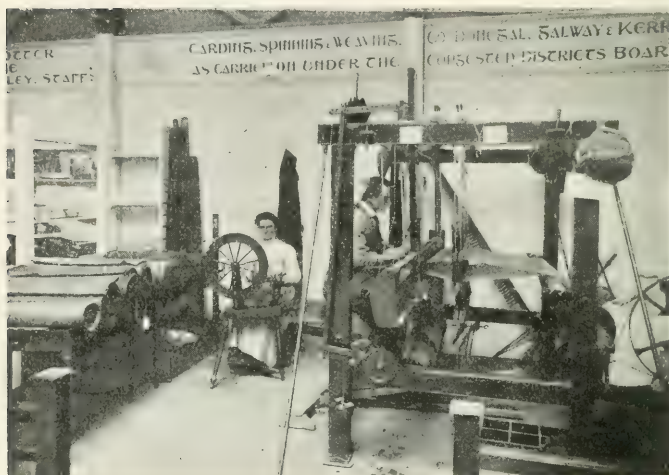
Contributed by :

Switzers, Ltd.—Artificial Flowers, Feather Boas and Passementerie.

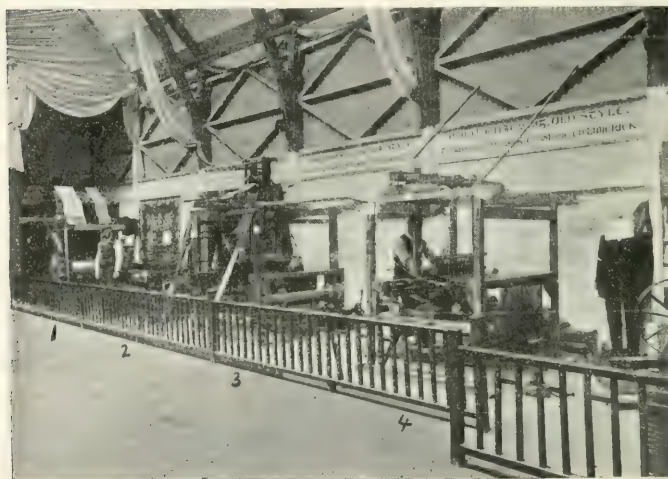
T. Read & Co.—Old Dublin Cutlery.

H. Thompson.—Dublin Cutlery and imported goods.

Home Industries Section.



LOOM AS ISSUED TO WESTERN WEAVERS BY CONGESTED DISTRICTS BOARD FOR IRELAND.



1. Hand Damask Loom. 2. Flower Automatic Loom. 3. Yorkshire Jacquard Loom. 4. Old-fashioned Irish Hand Loom.

Catalogue
No.

CLASS XII.—WORKING EXHIBITS.

(IN LARGE INDUSTRIAL HALL.)

- 161 Glove Making. Demonstrated by Fownes Bros. & Co., Worcester and Tipperary.
- 162 Hose Embroidering. Demonstrated by Smyth & Co., Balbriggan.
- 163 Handkerchief Embroidering. Demonstrated by W. R. McMurray, J.P., Belfast.
- 164 Lace Curtain Making. Demonstrated by Congested Districts Board for Ireland.
- 165 Carpet Making (Donegal). Demonstrated by Congested Districts Board for Ireland.

(IN SMALL INDUSTRIAL HALL.)

- 166 Hand-tufted Carpet Making (Kildare). Demonstrated by Naas Co-operative Home Industries Society.
- 167 Homespun Carding, Spinning and Weaving. Loom as supplied by the Congested Districts Board for Ireland to Western Weavers.
- 168 Homespun Weaving. (Old-fashioned Loom.) Thomas O'Brien, Clareglan, Co. Limerick.
- 169 Hand-loom Weaving. (Yorkshire Loom.) Wm. Ramsden & Son, Shelley, Huddersfield.
- 170 Hand-loom Weaving. (Automatic Loom.) Robert Hall & Sons (Bury), Ltd., Bury.



GLOVING AS REVIVED IN TIPPERARY.

- 171 Hand-loom Weaving. (Damask Loom.) W. R. McMurray, J.P., Belfast.
- 172 Mosaic Working. Demonstrated by E. L. Taddei, Dublin.
- 173 Marble Working. Demonstrated by Francis Ward, Dublin.
- 174 Tooth-brush Making. Demonstrated by R. Addis & Son, London.
- 175 Boot-upper Making. Demonstrated by E. J. Long, Dublin.
- 176 Photographs of Home Industries in other Countries. Specially prepared and arranged by Singer Manufacturing Co., London.
- 177 Generation of Power by Suction Gas Plant and distribution to Workers' Homes. Organized by Crossley Bros., Ltd., Openshaw.

VILLAGE HALL.

Designed and Erected by Humphreys Ltd., Knightsbridge.

EXHIBITORS.

GEO. BUTLER & SONS, DUBLIN.

Instruments for Brass and Fife and Drum Bands.

THOMAS MASON, DUBLIN.

Lantern and Equipment for Lectures.

MILLAR & BEATTY, DUBLIN.

Complete Furniture.

MAGUIRE & GATCHELL, DUBLIN.

Self-contained Light (Economic Gas).

THE NAVAN SAWMILLS & FURNITURE FACTORY, LTD.

Arm Chairs of Irish Oak and Walnut.

T. KELLY, DULEEK.

Carpeting.

ADVERTISEMENTS.

ESTABLISHED 1834.

By Appointment to H.M. THE KING.

Humphreys' Iron Buildings.

ARTISTIC. INEXPENSIVE. QUICKLY ERECTED.

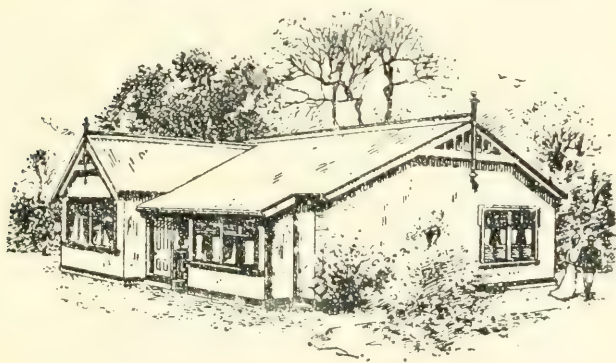
CHURCHES,
SCHOOLS,
BUNGALOWS,
WARE-
HOUSES,



ISOLATION
HOSPITALS :
1000 Erected for
the Local Boards
& Corporations
of the United
Kingdom.

IRON BUILDINGS OF EVERY DESCRIPTION.

Extended Terms of Payment if desired.



SOLE CONTRACTORS FOR THE

Irish International Exhibition Buildings.

Humphreys Ltd., 97 STEPHEN'S GREEN,
— DUBLIN, —

TELEPHONE No. 1653.

AND KNIGHTSBRIDGE, LONDON, S.W.

27 GOLD AND SILVER MEDALS.

VILLAGE HOSPITAL.

*Designed by J. F. McCabe, C.E. ; Built by Humphreys Ltd.
Knightsbridge.*

EXHIBITORS.

FANNIN & CO., DUBLIN.

All Surgical Instruments and Furnishings of Operating Room,
and Surgical Dressings in Surgery.

BOILEAU & BOYD, DUBLIN.

Medical Stores in Surgery.

MAGUIRE & GATCHELL, DUBLIN.

Kitchen Range and Stoves in Wards ; Baths and Fittings in
Dairy and Store.

PITNER LIGHTING CO., DUBLIN.

Self-contained Light throughout Buildings.

MILLAR & BEATTY, DUBLIN.

All Furniture.

LADY DUDLEY'S FUND FOR THE ESTABLISHMENT OF DISTRICT
NURSES IN THE POORER PARTS OF IRELAND.

Photographs depicting work in the Districts.

LABOURERS' COTTAGES.**NO. 1 PRIZE DESIGN :—**

*Designed by Sidney Moss, A.R.I.B.A., Eccles, Lancashire ;
Erected by The Concrete Machinery Co., Ltd., Water Street,
Liverpool.*

EXHIBITORS.

MILLAR & BEATTY, DUBLIN.

Complete Furniture.

THE CONCRETE MACHINERY CO., LIVERPOOL.

Machine for making Concrete Blocks similar to those used in
building.

Scale Plans of Cottages approved by the Local Government
Board.

NO. 2 PRIZE DESIGN :—

*Designed by J. Roseman Burns, Architect, Dublin ;
Erected by H. & J. Martin, Dublin.*

EXHIBITORS.

MILLAR & BEATTY, DUBLIN.

Complete Furniture.

Cottage Gardens laid out by ASHBOURNE CO., DUBLIN.

Fencing of Plots by KENNAN & SONS, LTD., DUBLIN.

The Arts and Crafts Sub-Section,

ORGANISED BY

THE ARTS AND CRAFTS SOCIETY OF IRELAND.

Committee :

President :

The Earl of Mayo.

Hon. Treasurer :

John A. C. Ruthven, C.E.

Joint Hon. Secretaries :

J. H. Brenan, R.H.A.,

P. Oswald Reeves, A.R.C.A., Lond.

F. W. Crossley

R. C. Orpen

Lieut.-Col. Plunkett, C.B.

G. N. Count Plunkett

T. R. Scott

Sir Arthur Vicars, K.C.V.O., Ulster

CATALOGUE

OF

EXHIBITS IN THE ARTS AND CRAFTS SUB-SECTION.

The Bureau will be open from 10.30 a.m. to 7.30 p.m. daily to take particulars of Purchases, of Orders for Replicas, etc., and to supply information regarding the Exhibits.

The word "By" means "designed and executed by."

- 1 Designed by C. J. M'GAHON.

Executed by G. WARWICK, J. O'HARE, W. MACKAY, and
J. BRENDON.

OAK PULPIT, with Stairs.

Exhibited by H. AND J. O'HARE, 97 Park Street, Dundalk.

- 2 Carved by WM. SISK, under M. J. M'NAMARA.

PANEL OF CARVED WOOD. £1 5s.

Exhibited by the CRAWFORD MUNICIPAL SCHOOL OF ART,
Cork.

- 3 Carved by MISS ALICE SHAW.

PANEL OF CARVED WOOD. £1.

Exhibited by MISS ALICE SHAW, Mount Saville, Terenure,
Co. Dublin.

A floor plan of a house with the following numbered rooms and areas:

- 1: Entry area at the bottom.
- 2: Hallway on the left side.
- 3: Small room at the bottom left.
- 4: Room above room 3.
- 5: Small room above room 4.
- 6: Room above room 5.
- 7: Small room above room 6.
- 8: Room above room 7.
- 9: Room above room 8.
- 10: Room at the top left.
- 11: Room at the top right.
- 12: Large room on the right side.
- 13: Room below room 12.
- 14: Room in the center left.
- 15: Room in the center.
- 16: Room in the center right.

A dashed line indicates a path starting from the bottom right, moving left through the entry area (1), then curving around the central rooms (14, 15, 16) and exiting towards the top right.

By passing round the Suf-section in the direction indicated by the dotted line in the plan, the exhibits may be inspected in the order in which they are numbered and entered in the catalogue.

1. PULPIT.
2. WOOD-CARVING.
3. NAAS CARPET
4. WOOD-CARVING.
5. STATUARY.
6. FIREPLACE.
7. STATUARY.
8. ABBEYLEIX CARPET.
9. WOOD-CARVING.
10. CARTOONS.
11. WOOD-CARVING.
12. ART METAL WORK.
13. ILLUMINATING—EMBROIDERY.
14. BOOKS AND BOXES.
15. ENAMELS.
16. LEATHER WORK.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 4 Carved by MISS ALICE SHAW.
 PANEL OF CARVED WOOD. £3 3s.
 Exhibited by MISS ALICE SHAW, Mount Saville, Terenure,
 Co. Dublin.

- 5 By WM. H. MEGAHEY.
 PANEL: "Rich and Rare." Sketch in Plaster.
 Exhibited by WM. H. MEGAHEY, 19 Newington Avenue,
 Belfast.

- 6 By WM. H. MEGAHEY.
 PANEL: "Tristram and Isolde." Sketch in Plaster.
 Exhibited by WM. H. MEGAHEY, 19 Newington Avenue,
 Belfast.

- 7 Designed by M. MOLLER.
 Executed by W. GLOVER, S. LEE, and W. M'CULLAGH.
 HALL SETTLE of Walnut. £8 10s.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.

- 8 Carved by C. PAYNE TIVY.
 PILASTER in Walnut.
 Exhibited by C. PAYNE TIVY, 101 James's Street, Dublin.

- 9 By WM. JACQUES, under M. J. M'NAMARA.
 CARVED WOOD PANEL, Foliage from Nature. 15s.
 Exhibited by CRAWFORD MUNICIPAL SCHOOL OF ART,
 Emmet Place, Cork.

- 10 By MISS ALICE SHAW.
 CARVED WOOD PANEL: Flowers. £2 2s.
 Exhibited by MISS ALICE SHAW, Mount Saville, Terenure,
 Co. Dublin.

- 11 Carved by WM. DONOVAN, under M. J. M'NAMARA.
 CARVED WOOD PANEL. £1 10s.
 Exhibited by CRAWFORD MUNICIPAL SCHOOL OF ART,
 Emmet Place, Cork.

- 12 Carved by JOSEPH HIGGINS, under M. J. M'NAMARA.
 CARVED WOOD PANEL. £1 5s.
 Exhibited by the CRAWFORD MUNICIPAL SCHOOL OF ART,
 Emmet Place, Cork.

- 13 Designed by MISS ST. J. WHITTY.
 Executed by P. CONNOLLY.
 COAL BOX, Walnut. £2 10s.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 14 Designed by MISS ST. J. WHITTY.
 Executed by FIFTEEN STUDENTS.
 ESCRITOIRE, Walnut.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical Schools, Bray, Co. Wicklow.
- 15 Designed by MISS ST. J. WHITTY.
 Executed by J. BELLEW and J. BURKE.
 FRAME, Carved Oak.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.
- 16-17 By MISS ST. J. WHITTY.
 MUSIC CUPBOARD; Walnut, with beaten copper panel.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.
- 18 By MISS ALICE SHAW,
 CARVED WOOD PANEL: Flowers. 15s.
 Exhibited by MISS ALICE SHAW, Mount Saville, Terenure,
 Co. Dublin.
- 19 Carved by JOSEPH HIGGINS, under M. J. M'NAMARA.
 CARVED WOOD PANEL: Foliage from Nature. 15s.
 Exhibited by the CRAWFORD MUNICIPAL SCHOOL OF ART,
 Emmet Place, Cork.
- 20 Carved by WM. DONOVAN, under M. J. M'NAMARA.
 CARVED WOOD PANEL. £1 10s.
 Exhibited by the CRAWFORD MUNICIPAL SCHOOL OF ART,
 Emmet Place, Cork.
- 21 Carved by WM. JACQUES, under M. J. M'NAMARA.
 CARVED WOOD PANEL. £1 5s.
 Exhibited by the CRAWFORD MUNICIPAL SCHOOL OF ART,
 Emmet Place, Cork.
- 22 Carved by C. PAYNE TIVY.
 PILASTER; Oak. £20.
 Exhibited by C. PAYNE TIVY, 101 James's Street, Dublin.
- 23 Designed by MISS ST. J. WHITTY.
 Executed by S. LEE.
 TABLE; Carved Walnut. £7.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.
- 24 Designed by MISS ST. J. WHITTY.
 Executed by J. BURKE.
 ALTAR CROSS; Carved Walnut. £7 7s.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 25 Designed by HERBERT INGHAM THORP.
 Executed by MISS B. DUNNY.
 RUG, Hand-tufted. £7.
 Exhibited by the NAAS CO-OPERATIVE HOME INDUSTRIES
 SOCIETY, LTD., Naas, Co. Kildare.
- 26 Designed by HERBERT INGHAM THORP.
 Executed by MISS B. DUNNY.
 CARPET Hand-tufted. £41.
 Exhibited by the NAAS CO-OPERATIVE HOME INDUSTRIES
 SOCIETY, LTD., Naas, Co. Kildare.
- 27 Designed by MISS ST. J. WHITTY.
 Executed by J. BURKE.
 HYMN BOARD, Walnut. £2 5s.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.
- 28 Designed by MISS ST. J. WHITTY.
 Made by P. RING, S. LEE, W. GLOVER, and J. BELLEW.
 PRAYER DESK, Oak. £28.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.
- 29 By MISS K. A. SCOTT.
 BRACKET, with Panel of Wild Iris from Nature.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.
- 30 Made by J. BELLEW.
 NORWEGIAN CHAIR, Oak. £6 10s.
 Exhibited by the BRAY ART FURNITURE INDUSTRY,
 Technical School, Bray, Co. Wicklow.
- 31 By ALBERT G. POWER.
 STATUETTE OF CUCHULIAN.
 Exhibited by ALBERT G. POWER, 16 Avondale Avenue,
 N. C. Road, Dublin.
- 32 By MISS ALICE SHAW.
 MANTELPIECE, Carved Wood. £15.
 Exhibited by MISS ALICE SHAW, Mount Saville, Terenure,
 Co. Dublin.
- 33 By ALBERT G. POWER.
 SKETCH MODEL OF STATUETTE: "Sculpture."
 Intended for inclusion in the general scheme for the
 embellishment of Molesworth Street, Dublin.
 Lent by the MOLESWORTH STREET COMMITTEE. C. A.
 Owen, Esq., F.R.I.B.A., Chairman; Robert Forbes,
 Esq., Hon. Treasurer.

ARTS AND CRAFTS SUB-SECTION—*continued*.

- 34 By WM. J. PEARSE.

SKETCH MODEL OF STATUETTE: "Folklore."

Intended for inclusion in the scheme for the embellishment of Molesworth Street, Dublin.

Lent by the MOLESWORTH STREET COMMITTEE.

- 35 By W. J. DOUGLAS.

STAINED AND LEADED GLASS WINDOW.

Exhibited by WARD AND PARTNERS, 7 Clarendon Place, May Street, Belfast.

- 36 By MERVYN LAWRENCE.

Cast and coloured by the IRISH ART COMPANIONS.

BUST OF COLOURED PLASTER: "Erina."

Lent by the EARL OF MAYO, K.P.

- 37 By MISS GWENDOLIN HERBERT.

STATUETTE IN TERRA COTTA: "Mother and Child." £2 10s.

Exhibited by MISS GWENDOLIN HERBERT, Clyde Road, Dublin.

- 38 By MISS R. H. GRÖNE.

SKETCH MODEL OF STATUETTE: "Literature."

Intended for inclusion in the scheme for the embellishment of Molesworth Street, Dublin.

Lent by the MOLESWORTH STREET COMMITTEE.

- 39 By MISS CATHERINE O'BRIEN, under A. E. CHILD, at the Metropolitan School of Art, Dublin.

STAINED AND LEADED GLASS WINDOW: "Rich and Rare."

Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

- 40 By MISS ETHEL RHIND, under A. E. CHILD, at the Metropolitan School of Art, Dublin.

STAINED AND LEADED GLASS WINDOW: "St. Colmcille at Iona."

Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

- 41 Made by MISS ETHEL RHIND, under A. E. CHILD, at the Metropolitan School of Art, Dublin.

STAINED AND LEADED GLASS WINDOW: "Fides." From Drawing by Sir E. Burne-Jones.

Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 42 By MISS ETHEL RHIND, under A. E. CHILD, at the Metropolitan School of Art, Dublin.
 STAINED AND LEADED GLASS WINDOW: "St. Kemoc and the Children of Lir."
 Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 43 By EDWIN W. M'GOWAN.
 STATUETTE: "Cuchulian." £30.
Bronze or Marble, £75.
 Exhibited by EDWIN W. M'GOWAN, 49 Jones's Road, Dublin.
- 44 By MISS EDITH K. M'DERMOTT.
 FIRE SCREEN of Carved Oak, with copper panels. £10 10s.
 Exhibited by MISS E. K. M'DERMOTT, 15 Cameron Street, Belfast.
- 45 RUG, Hand-tufted. £2 19s. 6d.
 Exhibited by the ABBEYLEIX CARPET FACTORY, Abbey-leix, Queen's County.
 Dublin Agents: PIM BROS., LTD., South Great George's St
- 46 CARPET, Hand-tufted. £40 2s. 6d.
 Exhibited by the ABBEYLEIX CARPET FACTORY, Abbey-leix, Queen's County.
 Dublin Agents: PIM BROS., LTD., South Great George's Street.
- 47 Constructed by W. BICKLEY, and Carved by JAMES MOLONEY.
 HALL CHEST, Oak. £6.
 Exhibited by the CLONKEEN WOOD CARVING CLASS, Barrington Bridge, Co. Limerick
- 48 By H. G. COGLE, under R. A. DAWSON.
 BOX, Copper and Steel. £6 10s.
 Exhibited by the SCHOOL OF ART, Municipal Technical Institute, Belfast.
- 49 RUG, Hand-tufted. £2 12s.
 Exhibited by the ABBEYLEIX CARPET FACTORY, Abbey-leix, Queen's County.
 Dublin Agents: PIM BROS., LTD., South Great George's Street.
- 50 Designed by M. J. M'NAMARA.
 Executed by MRS. M. D. GALE, under M. J. M'NAMARA.
 ARM CHAIR, Carved Oak.
 Exhibited by the CRAWFORD MUNICIPAL SCHOOL OF ART, Emmet Place, Cork.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 51 By J. J. CLARKE.
OPUSSECTILE PANEL : Station of the Cross. £14.
Exhibited by J. CLARKE AND SONS, 33 North Frederick
Street, Dublin.
- 52 RUG, Hand-tufted. £4 1s.
Exhibited by the ABBEYLEIX CARPET FACTORY, Abbey-
leix, Queen's County.
Dublin Agents : PIM BROS., LTD., South Great George's
Street.
- 53 Designed by R. A. DAWSON, A.R.C.A., IOND.
Executed by MRS. DAWSON.
FIRE SCREEN, Oak, with patch-work panels.
Exhibited by R. A. DAWSON, A.R.C.A., Inniskeen, High
Holywood, Co. Down.
- 54 By J. J. CLARKE.
DRAWING OF STAINED GLASS WINDOW :
"Nativity, Crucifixion, Assumption."
Exhibited by J. CLARKE AND SONS, 33 North Frederick
Street, Dublin.
- 55 By W. F. NAGLE.
DESIGN FOR CHURCH DECORATION, at Blackrock.
Exhibited by J. CLARKE AND SONS, 33 North Frederick
Street, Dublin.
- 56 By MISS ANNA L. GRAHAM.
WOODEN STOOL, Chipped Carved. £1.
Exhibited by MISS ANNA L. GRAHAM, 47 Wellington Place,
Clyde Road, Dublin.
- 57 By MISS E. K. M'DERMOTT.
ROSE BOWL, Stained Wood with Enamels. £1 5s.
Exhibited by MISS E. K. M'DERMOTT, 15 Cameron Street,
Belfast.
- 58 By J. J. CLARKE
DESIGN FOR STAINED GLASS WINDOW : "St.
Patrick baptizing Princesses."
Exhibited by J. CLARKE AND SONS, 33 North Frederick
Street, Dublin.
- 59 Drawn by W. F. NAGLE.
CARTOON FOR ABOVE. The Window made from
this Cartoon may be seen in the entrance to the
Exhibition, Ballsbridge.
Exhibited by J. CLARKE AND SONS, 33 North Frederick
Street, Dublin.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 60 Embroidered by MISS EMILY O'CONNOR.
BOOK STAND, Revolving, with embroidered top. £4.
Exhibited by MISS EMILY O'CONNOR, Elsinore, Merrion
Road, Dublin.
- 61 By MISS ALICE SHAW.
BUREAU, Walnut. £9 9s.
Exhibited by MISS ALICE SHAW, Mount Saville, Terenure,
Co. Dublin.
- 62 By MISS ANNA L. GRAHAM.
WOODEN STOOL, Chipped Carved. £1.
Exhibited by MISS ANNA L. GRAHAM, 47 Wellington Place,
Clyde Road, Dublin.
- 63-64 By W. J. DOUGLAS.
CARTOONS FOR STAINED GLASS WINDOWS :
"Faith and Hope," in St. James', Malone.
Exhibited by WARD AND PARTNERS, 7 Clarendon Place,
May Street, Belfast.
- 65 Made by MRS. TWEMLOW.
HEARTHTRUG, Hand-tufted.
Exhibited by MRS. TWEMLOW, Florence Villa, Dalkey.
- 66 Designed by DANIEL EGAN.
Executed by DANIEL EGAN and MISS R. G. FALKINER.
FIRESCREEN, with embroidered panel.
Exhibited by MISS R. G. FALKINER, 1 Earlsfort Terrace,
Dublin.
- 67 By the ROYAL IRISH SCHOOL OF ART NEEDLEWORK.
TRINKET TRAY. £2 10s.
Exhibited by the ROYAL IRISH SCHOOL OF ART NEEDLE-
WORK, 20 Lincoln Place Dublin.
- 68 By MISS ISABEL COURTNEY.
MIRROR, with embossed leather frame. £5.
Exhibited by MISS ISABEL COURTNEY, The Square,
Kenmare.
- 69 By MISS E. GILMORE, under R. A. DAWSON.
FIRESCREEN, Oak. £4.
Exhibited by SCHOOL OF ART, Municipal Technical
Institute, Belfast.
- 70 Designed by R. A. DAWSON, A.R.C.A., LOND.
Executed by MRS. DAWSON.
PANEL, in patchwork, for pianoforte decoration.
Exhibited by R. A. DAWSON, A.R.C.A., Inniskeen, High
Holywood, Co. Down.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 71 By MISS GLADYS SCOTT.
EMBOSSSED LEATHER PANEL. £3.
Exhibited by MISS GLADYS SCOTT, The Demesne,
Londonderry.
- 72 Embroidered by MISS WIDDUP.
EMBROIDERED PICTURE. £6.
Exhibited by the ROYAL IRISH SCHOOL OF ART NEEDLE-
WORK, 20 Lincoln Place, Dublin.
- 73 Colour Print by J. YEATS; Embroidery by MISS BOYD.
EMBROIDERED PICTURE. £2 2s.
Exhibited by the ROYAL IRISH SCHOOL OF ART NEEDLE-
WORK, 20 Lincoln Place, Dublin.
- 74 By WM. LONSDALE.
CARD TABLE, Inlaid, Mahogany. £6 6s.
Exhibited by WM. LONSDALE, 17 Avenue Road, Lurgan.
- 75 Designed by DANIEL EGAN.
Executed by DANIEL EGAN and MISS R. G. FALKINER.
FIRESCREEN, with embroidered panel.
Exhibited by MISS R. G. FALKINER, 1 Earlsfort Terrace,
Dublin.
- 76 Designed by TRAVERS FALKNER.
Executed by MRS. J. M. S. SADLEIR HACKETT.
COAT OF ARMS, Tapestry.
Exhibited by MISS A. G. SADLEIR HACKETT, Yew Tree,
Shillelagh, Co. Wicklow.
- 77 Designed by J. WILLIAMS.
Executed by SAMUEL CARRUTH.
CANDLESTICK, Brass. £1 10s.
Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
Industry, Fivemiletown, Co. Tyrone.
- 78 Designed by J. WILLIAMS.
Executed by P. ROCHE.
COAL SCUTTLE, Copper. £4 10s.
Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
Industry, Fivemiletown, Co. Tyrone.
- 79 Designed by J. WILLIAMS.
Executed by MATHEW REID.
DOOR PLATES, Pair of Copper. 8s. 6d.
Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
Industry, Fivemiletown, Co. Tyrone.
- 80 Made by MATHEW REID.
DOOR PLATES, Pair of Brass. 8s. 6d.
Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
Industry, Fivemiletown, Co. Tyrone.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 81 Designed by J. WILLIAMS.
 Executed by P. ROCHE.
 SCONCE, of Copper. £2 10s.
 Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 82 Designed by MISS MARY WILLIAMS.
 Executed by MATHEW REID.
 TAULLARD, of Copper. 15s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 83 Designed by MISS MARY WILLIAMS.
 Executed by MATHEW REID.
 FLOWER POT COVER, of Brass. £1 5s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 84 Designed by MISS MARY WILLIAMS.
 Executed by THOMAS CURRAN.
 FLOWER-POT COVER, of Copper. £2 2s.
 Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 85 Designed by CAPT. H. MONTGOMERY.
 Executed by SAMUEL CARRUTH.
 DISH, of Copper. £2 2s.
 Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 86 Designed by J. WILLIAMS.
 Executed by THOMAS CURRAN.
 DISH, of Copper. £2 2s.
 Exhibited by MRS. MONTGOMERY, the Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 87 Made by P. ROCHE.
 FENDER, Brass. £5 5s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 88 Designed by H. DE F. MONTGOMERY.
 Executed by HENRY BUSBY.
 TRAY, of Copper. 5s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 89 Made by SAMUEL CARRUTH.
 CANDLESTICK, of Copper. 7s. 6d.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone

ARTS AND CRAFTS SUB-SECTION—*continued*

- 90 Designed by J. WILLIAMS.
 Executed by THOMAS CURRAN.
 TEA TRAY, Brass. £3.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 91 Designed by J. WILLIAMS.
 Executed by P. ROCHE.
 MIRROR, with Copper frame. £5 5s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 92 Designed by MISS MARY WILLIAMS.
 Executed by THOMAS CURRAN.
 FLOWER BOX, Brass. £1 12s. 6d.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 93 Designed by H. DE F. MONTGOMERY.
 Executed by HENRY BUSBY.
 MUG, Copper. 15s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 94 Designed by J. WILLIAMS.
 Executed by MATHEW REID.
 TAULLARD, of Copper. £2 10s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 95 Designed by J. WILLIAMS.
 Executed by SAMUEL CARRUTH.
 MIRROR, with Copper frame. £3 10s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 96 Designed by MISS MARY WILLIAMS.
 Executed by SAMUEL CARRUTH.
 CLOCK, with Copper Face, etc. £2.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 97 Made by P. ROCHE.
 BRIDGE BOX, of Pewter. £1 1s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 98-99 By P. ROCHE.
 BUTTONS, Enamelled, 3 sets of Ladies'.
 Each set, £1 2s. 6d.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 100 Designed by J. WILLIAMS.
 Executed by P. ROCHE.
 SERVIETTE RING. 14s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 101 By P. ROCHE.
 ENAMELLED BUTTONS, set of three. 12s. 6d.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 102 By P. ROCHE.
 ENAMELLED BUTTONS, set of six. £1 2s. 6d.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 103 By P. ROCHE.
 HAT PINS, Enamelled Silver. 5s. each.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fiv. miletown, Co. Tyrone.
- 104-105 Designed by J. WILLIAMS.
 Executed by P. ROCHE.
 TWO BUCKLES. £1 5s. each.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 106 By P. ROCHE.
 ENAMELLED BUTTONS, set of four. 15s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 107 Designed by J. WILLIAMS.
 Executed by P. ROCHE.
 SERVIETTE RING. 14s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 108 By P. ROCHE.
 SET OF LINKS. 15s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 109 By P. ROCHE.
 ENAMELLED BUTTONS, set of six. £1 10s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.
- 110 Designed by J. KENDAL.
 Executed by SAMUEL CARRUTH.
 CASKET. 15s.
 Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
 Industry, Fivemiletown, Co. Tyrone.

ARTS AND CRAFTS SUB-SECTION—*continued*.

- 111 By P. ROCHE.
ENAMELLED BUTTONS, set of six. £1 1s.
Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
Industry, Fivemiletown, Co. Tyrone.
- 112 By P. ROCHE.
ENAMELLED BUTTONS, set of three. 12s. 6d.
Exhibited by MRS. MONTGOMERY, Fivemiletown Metal
Industry, Fivemiletown, Co. Tyrone
- 113 Carved by DENIS O'CONNOR.
CRUCIFIX, of Carved Satinwood and Yellow Pine
Frame. £5.
Exhibited by the KILLARNEY FURNITURE INDUSTRY,
Killarney, Co. Kerry.
- 114 By CHARLES BRAITHWAITE.
ILLUMINATED POEM ON VELLUM: "Sea Wreck."
By Moira O'Neill.
Exhibited by CHARLES BRAITHWAITE, 20 Rosemary
Street, Belfast.
- 115 By CHARLES BRAITHWAITE.
ILLUMINATED POEM ON VELLUM: "Lost." By
Moira O'Neill.
Exhibited by CHARLES BRAITHWAITE, 20 Rosemary
Street, Belfast.
- 116 By MISS ALICE M. O'ROURKE.
SPECIMEN OF ILLUMINATION.
Exhibited by MISS A. M. O'ROURKE, 72 Upper Dorset
Street, Dublin.
- 117 Copied by MISS MARY MAHALM.
PAGE FROM THE BOOK OF DURROW. £5 5s.
Exhibited by MISS MARY MAHALM, 6 Church Avenue,
Rathmines, Co. Dublin.
- 118 By JOHN VINYCOMB, M.R.I.A.
Reproductions by W. C. G. BAIRD, LTD., Belfast.
BOOK PLATE for Royal Warrant Holders.
Exhibited by JOHN VINYCOMB, M.R.I.A., Riverside, Holy-
wood, Co. Down.
- 119 By JOSEPH DEMPSEY.
SPECIMEN OF ILLUMINATION. £35.
Exhibited by JOS. DEMPSEY, 133 Donegall Street, Belfast.
- 120 Copied by MISS MARY MAHALM.
PAGE FROM THE BOOK OF KELLS. £7 7s.
Exhibited by MISS MARY MAHALM, 6 Church Avenue,
Rathmines, Dublin

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 121 By PETER P. O'MALLEY.
INITIAL LETTER, Illuminated.
Exhibited by PETER P. O'MALLEY, 6 Donore Avenue,
Dublin.
- 122-123 By JOHN VINYCOMB, M.R.I.A.
BOOK PLATES, Proof-prints.
Exhibited by JOHN VINYCOMB, Riverside, Holywood,
Co. Down.
- 124 Designed by MRS. VERE O'BRIEN.
Executed by MISS BRIDGET BOURKE.
GARDEN APRON, Embroidered unbleached Calico.
4s. 9d.
Exhibited by MRS. VERE O'BRIEN, Ballyalla, Ennis, Co.
Clare.
- 125 Designed by MRS. VERE O'BRIEN.
Executed by MISS NORA CASEY.
MUSLIN PINAFORE, Clare Embroidery. 7s. 6d.
Exhibited by MRS. VERE O'BRIEN, Ballyalla, Ennis, Co.
Clare.
- 126 By MISS MEAVE E. M. O'BYRNE, under MISS ALICE JACOB,
at the Metropolitan School of Art, Dublin.
CHIFFON SCARF, Stencilled.
Lent by the DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.
- 127 Designed by MRS. VERE O'BRIEN.
Executed by MISS BRIDGET LALOR.
CUSHION, WITH SATIN COVER, Clare Embroidery.
£1 7s.
Exhibited by MRS. VERE O'BRIEN, Ballyalla, Ennis, Co.
Clare.
- 128 Designed by MRS. VERE O'BRIEN.
Executed by MISS MARY O'DEA.
SMOCK, Blue Linen, Clare Embroidery. 10s. 6d.
Exhibited by MRS. VERE O'BRIEN, Ballyalla, Ennis, Co.
Clare.
- 129 Designed by MRS. VERE O'BRIEN.
Executed by MISS SUSAN BURKE.
CHAIR BACK COVER, Clare Embroidery. 5s.
Exhibited by MRS. VERE O'BRIEN, Ballyalla, Ennis, Co.
Clare.
- 130 Designed by MRS. VERE O'BRIEN.
Executed by MISS HELENA MALONEY.
PATCH-WORK COVERLET, Clare Embroidery. £1 10s.
Exhibited by MRS. VERE O'BRIEN, Ballyalla, Ennis, Co.
Clare.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 131 Designed by H. G. COGLE, under R. A. DAWSON.
 Executed by MRS. COGLE.
 TABLE CENTRE, Embroidered. £1 10s.
 Exhibited by the SCHOOL OF ART, Municipal Technical
 Institute, Belfast.
- 132 Designed by H. G. COGLE, under R. A. DAWSON.
 Executed by MRS. COGLE.
 CUSHION COVER, Appliqué. £1.
 Exhibited by the SCHOOL OF ART, Municipal Technical
 Institute, Belfast.
- 133 Designed by H. G. COGLE, under R. A. DAWSON
 Executed by MRS. COGLE.
 COT COVER, Appliqué. £1 10s.
 Exhibited by the SCHOOL OF ART, Municipal Technical
 Institute, Belfast.
- 134 By MISS ELEANOR KELLY.
 BOOK BOUND IN LEATHER: "Ireland in the New
 Century." By Sir Horace Plunkett. £1 15s. 6d.
 Exhibited by MISS ELEANOR KELLY, 42 Lower Leeson
 Street, Dublin.
- 135 By MRS. H. H. WYATT.
 JEWEL CASKET, Painted Wood. £3 3s.
 Exhibited by MRS. H. H. WYATT, Rockfield, Stranolar,
 Co. Donegal.
- 136 Embroidered by MISS WILSON.
 PRAYER BOOK. £6 6s.
 Exhibited by the ROYAL IRISH SCHOOL OF ART
 NEEDLEWORK.
- 137 By MISS KATHLEEN FOX, under MISS ALICE JACOB, at the
 Metropolitan School of Art, Dublin.
 BOOK of Plain Leaves, Bound in Leather, with Irish
 inscription: "I sat down under the shadow with
 great delight."
 Lent by the DEPARTMENT OF AGRICULTURE AND
 TECHNICAL INSTRUCTION FOR IRELAND.
- 138 By MISS ELEANOR KELLY.
 BOOK BOUND IN PEAT: "The Land." By P.
 Colum.
 Exhibited by MISS ELEANOR KELLY, 42 Lower Leeson
 Street, Dublin.
- 139 Designed by MISS ALICE SHAW.
 Executed by C. WALKER.
 BOOK REST, Carved Walnut. 15s.
 Exhibited by MISS ALICE SHAW, Mount Saville, Terenure,
 Dublin.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 140 By the DUN EMER PRESS.
NINE BOOKS; Specimens of Printing.
Lent by the EARL OF MAYO, K.P.
- 141 By MISS ELEANOR KELLY.
BOOK BOUND IN LEATHER: "Homeward Songs
by the Way." By A. E. £1 3s. 6d.
Exhibited by MISS ELEANOR KELLY, 42 Lower Leeson
Street, Dublin.
- 142 By MISS ELEANOR KELLY.
BOOK BOUND IN LEATHER: "Songs of the Glens
of Antrim." By Moira O'Neill. £1 7s. 6d.
Exhibited by MISS ELEANOR KELLY, 42 Lower Leeson
Street, Dublin.
- 143 Embroidered by MISS TEMPLE.
BOOK IN EMBROIDERED BINDING: Poetical
Works of Christina Rossetti. £3 3s.
Exhibited by the ROYAL IRISH SCHOOL OF ART NEEDLE-
WORK, 20 Lincoln Place, Dublin.
- 144 By MRS. H. H. WYATT.
JEWEL CASKET, Painted Wood. £3 3s.
Exhibited by MRS. H. H. WYATT, Rockfield, Stranorlar,
Co. Donegal.
- 145 By JAMES HOEY, under MISS ALICE JACOB, at the Metro-
politan School of Art, Dublin.
JEWEL BOX; Rosewood, with leather panels.
Lent by the DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.
- 146 By MISS ELEANOR KELLY.
TWO VOLS., BOUND IN LEATHER: "The Irish
Rebellion, 1798."
Exhibited by MISS ELEANOR KELLY, 42 Lower Leeson
Street, Dublin.
- 147 Embroidered by MISS BOYD.
BOOK BOUND IN EMBROIDERED WHITE KID:
"The Art of England and the Pleasures of England;"
By J. Ruskin. £3 3s.
Exhibited by the ROYAL IRISH SCHOOL OF ART NEEDLE-
WORK, 20 Lincoln Place, Dublin.
- 148 By MISS M. C. CAMPBELL.
BOOK BOUND IN LEATHER: "Songs of the Glens
of Antrim." By Moira O'Neill. 15s.
Exhibited by MISS M. C. CAMPBELL, Ballynatrua,
Londonderry.

ARTS AND CRAFTS SUB-SECTION—*continued*.

- 149 By MRS. H. H. WYATT.
JEWEL BOX, Painted Wood. £2 10s.
Exhibited by MRS. H. H. WYATT, Rockfield, Stranorlar,
Co. Donegal.
- 150 By MISS ELEANOR KELLY.
BOOK BOUND IN LEATHER: Old Irish Catechism,
printed 16th century, binding from a 16th century
pattern. £5.
Exhibited by MISS ELEANOR KELLY, 42 Lower Leeson
Street, Dublin.
- 151 By MISS ELEANOR KELLY.
BOOK BOUND IN LEATHER: "Paul the Minstrel."
£1 10s. 6d.
Exhibited by MISS ELEANOR KELLY, 43 Lower Leeson
Street, Dublin.
- 152 By MISS NORA BRIEN, under P. OSWALD REEVES, at the
Metropolitan School of Art, Dublin.
PIN BOX of Copper and Enamel, with Cushion.
Lent by the DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.
- 153 By P. OSWALD REEVES, A.R.C.A., LOND.
ENAMEL PLAQUE, IN SILVER FRAME: "A
Falling Star."
Lent by THE COUNTESS OF DUDLEY.
- 154 By MISS MEAVE E. M. O'BYRNE, under P. OSWALD REEVES,
at the Metropolitan School of Art, Dublin.
BOWL of Copper and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.
- 155 By MISS DORA K. ALLEN, under P. OSWALD REEVES, at the
Metropolitan School of Art, Dublin.
INK POT of Silver and Enamel: "Peace and War."
Lent by the DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.
- 156 By JAMES J. BURKE under P. OSWALD REEVES, at the
Metropolitan School of Art, Dublin.
SNUFF BOX of Silver and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.
- 157 By MISS NORA MURPHY, under P. OSWALD REEVES, at the
Metropolitan School of Art, Dublin.
SALT CELLAR of Silver and Enamel: "Neptune's
Horses."
Lent by the DEPARTMENT OF AGRICULTURE AND
TECHNICAL INSTRUCTION FOR IRELAND.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 158 By MISS NORA MURPHY, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PLAQUE: "Summer."
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 159 By MISS ELIZABETH JOHNSTONE, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PLAQUE: "Macaw and Snake."
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 160 By FRANCIS J. RIGNEY, under P. OSWALD REEVES at the Metropolitan School of Art, Dublin.
ENAMEL PANEL FOR BOOK COVER.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 161 By MISS GWENDOLINE HERBERT.
CIGARETTE BOX, with Bronze Top and Mother-of-Pearl Sides. £5.
Exhibited by MISS GWENDOLINE HERBERT, Clyde Road, Dublin.
- 162 By MISS NORA MURPHY, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
CUP, with Stem and Foot, of Silver and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 163 By MISS MARY DORAN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
BOX FOR OLD COINS, of Copper and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 164 By MISS RENE ROMNEY-KANE, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PANEL, for Cover of Book of Old Legends.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 165 By MISS NORA MURPHY, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin. •
ENAMEL PANEL.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 166 By MISS DORA K. ALLEN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PANEL for small Cabinet.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 167 By WM. L. WHELAN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PANEL for Jewel Box.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 168 By MISS MARY DORAN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PLAQUE.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 169 By MISS ALICE BRITAIN, under R. A. DAWSON.
ROSE BOWL of Copper. £4.
Exhibited by the SCHOOL OF ART, Municipal Technical Institute, Belfast.
- 170 Made by DANIEL MOULANG.
SILVER BOWL, Old Irish Pattern. £1 12s. 6d.
Exhibited by DANIEL MOULANG, 31 Wellington Quay, Dublin.
- 171 Made by DANIEL MOULANG.
PORRINGER, Silver, Old Irish Pattern. £3 5s.
Exhibited by DANIEL MOULANG, 31 Wellington Quay, Dublin.
- 172 Made by DANIEL MOULANG.
PORRINGER, Silver, Old Irish Pattern. £3 5s.
Exhibited by DANIEL MOULANG, 31 Wellington Quay, Dublin.
- 173 By MISS FLORENCE DORAN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
CARD BOX of Copper and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 174 By JAMES J. BURKE, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
PAPER KNIFE of Ebony, Silver and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 175 By JAMES W. FREETH, A.R.C.A., LOND.
MEDALLION, Limoge Enamel.
Exhibited by J. W. FREETH, 2 Vokes Villas, Ballinacurra, Limerick.
- 176 By MISS ALICE BRITAIN, under R. A. DAWSON.
ENAMEL PANEL: "The North Wind." £8.
Exhibited by the SCHOOL OF ART, Municipal Technical Institute, Belfast.

ARTS AND CRAFTS SUB SECTION—*continued*.

- 177 By MISS NORA BRIEN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PANEL for Book Cover.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 178 By MISS RENÉ ROMNEY-KANE, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PANEL for Book Cover.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 179 By MISS GWENDOLIN HERBERT, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ENAMEL PANEL for Book Cover.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 180 By R. A. DAWSON, A.R.C.A., LOND.
PLANT STAND, Oak, with Enamel Panels.
Exhibited by R. A. DAWSON, Inniskeen, High Holywood, Co. Down.
- 181 By MISS KATHLEEN FOX, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
VASE of Copper and Enamel, with Bronze Stand: "Going to the Feast."
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 182 By MISS ETHEL SYMES, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
WINE DECANTER LABEL of Silver and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 183 By MISS GWENDOLIN HERBERT.
MEDAL of Silver, for the Women's Physical Training College.
Exhibited by MISS GWENDOLIN HERBERT, Clyde Road, Dublin.
- 184 By JAMES J. BURKE, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
CLASP, part of, of Silver and Enamel: "Periods of the Year."
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 185 By JAMES J. BURKE, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
BROOCH of Silver and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 186 By MISS FLORENCE DORAN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
BOOK COVER of Silver and Enamel: "Songs of Summer."
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 187 By MISS G. CARTER, under R. A. DAWSON and MISS ALICE BRITTAIN.
PENDANT AND CHAIN, set with Stones. £2.
Exhibited by the SCHOOL OF ART, Municipal Technical Institute, Belfast.
- 188 By MISS DORA K. ALLEN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
PENDANT RELIQUARY AND CHAINS of Silver and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 189 By MISS ALICE RITCHIE, under R. A. DAWSON and MISS ALICE BRITTAIN.
PENDANT AND CHAINS of Silver and Enamel. £1 10s.
Exhibited by the SCHOOL OF ART, Municipal Technical Institute, Belfast.
- 190 By MISS DORA K. ALLEN, under P. OSWALD REEVES, at the Metropolitan School of Art, Dublin.
ROSE-LEAF POT of Copper and Enamel.
Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 191 By P. OSWALD REEVES, A.R.C.A., LOND.
SILVER BOX, WITH ENAMEL TOP: "Plenty with Blessing." £10.
Exhibited by P. OSWALD REEVES. 25 Kenilworth Square, Rathgar, Co. Dublin.
- 192 By MISS M. LLOYD and MISS BRUEN, from old Irish design.
LEATHER COVER, for "Christian Science Quarterly." £1 10s.
Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.

ARTS AND CRAFTS SUB-SECTION—*continued.*

- 193 By MISS M. LLOYD.
 LEATHER COVER, for "Unity of Good." By Mary Baker G. Eddy. £1 1s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 194 By MISS ANNA L. GRAHAM, under MISS ALICE JACOB, at the Metropolitan School of Art, Dublin.
 LEATHER BLOTTER.
 Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 195 By ELIZABETH KELLY, under MISS ALICE JACOB, at the Metropolitan School of Art, Dublin.
 FAN COVER of Painted Silk.
 Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.
- 196 By MISS ALBINA M. COLLINS.
 BOOK COVER of Embossed Leather. £1 11s 6d.
 Exhibited by MISS ALBINA M. COLLINS, Central Technical Schools, Clonmel, Co Tipperary.
- 197 By MISS ISABEL COURTNEY.
 STATIONERY CASE of Embossed Leather. £3.
 Exhibited by MISS I. COURTNEY, The Square, Kenmare.
- 198 By MISS M. LLOYD.
 LEATHER COVER, "Thorn-trees," for "Unity of Good." By Mary Baker G. Eddy. £1 5s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 199 By MISS M. LLOYD and MISS M. S. BRUEN, from old Irish design.
 LEATHER COVER, for "Science and Health." By Mary Baker G. Eddy. £1 5s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 200 Designed by MISS M. LLOYD.
 Executed by MISS M. S. BRUEN.
 LEATHER COVER, for "Miscellaneous Writings." By Mary Baker G. Eddy. £1 1s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 201 By MRS. H. H. WYATT.
 VELLUM BLOTTER, Painted. £1 5s.
 Exhibited by MRS. H. H. WYATT, Rockfield, Stranorlar, Co. Donegal.
- 202 By MISS ANNA L. GRAHAM, under MISS ALICE JACOB, at the Metropolitan School of Art, Dublin.
 LEATHER BLOTTER.
 Lent by the DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

ARTS AND CRAFTS SUB-SECTION—*continued*.

- 203 Made by MISS C. O'BRIEN, from old German design.
 LETTER CASE, in Modelled Leather. 10s.
 Exhibited by MISS C. O'BRIEN, 6 Leeson Park, Dublin.
- 204 By MISS BLANCHE FAGAN.
 LEATHER COVER, for "Miscellaneous Writings."
 By Mary Baker G. Eddy. £1 5s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 205 By MISS ELIZABETH JOHNSTONE, under MISS ALICE JACOB,
 at the Metropolitan School of Art, Dublin.
 LEATHER MAT.
 Lent by the DEPARTMENT OF AGRICULTURE AND
 TECHNICAL INSTRUCTION FOR IRELAND.
- 206 By MISS M. C. CAMPBELL.
 LEATHER BELT. 6s. 6d.
 Exhibited by MISS M. C. CAMPBELL, Ballynatrua,
 Londonderry.
- 207 By MISS M. C. CAMPBELL.
 PEN WIPER of Leather. 3s.
 Exhibited by MISS M. C. CAMPBELL, Ballynatrua,
 Londonderry.
- 208 By MISS MEAVE E. M. O'BYRNE, under MISS ALICE JACOB,
 at the Metropolitan School of Art, Dublin.
 HAND MIRROR, with Leather Panels.
 Lent by the DEPARTMENT OF AGRICULTURE AND
 TECHNICAL INSTRUCTION FOR IRELAND.
- 209 By MISS ANNA L. GRAHAM, under MISS ALICE JACOB, at
 the Metropolitan School of Art, Dublin.
 BELT, of Embossed Leather.
 Lent by the DEPARTMENT OF AGRICULTURE AND
 TECHNICAL INSTRUCTION FOR IRELAND.
- 210 By MISS NINA E. ROSSITER, under MISS ALICE JACOB, at
 the Metropolitan School of Art, Dublin.
 FAN COVER of Painted Silk.
 Lent by the DEPARTMENT OF AGRICULTURE AND
 TECHNICAL INSTRUCTION FOR IRELAND.
- 211 By MISS ALBINA M. COLLINS.
 BOOK REST of Embossed and Coloured Leather. £3 3s.
 Exhibited by MISS A. M. COLLINS, Central Technical
 School, Clonmel, Co. Tipperary.
- 212 By MISS B. FAGAN.
 LEATHER COVER, for "Christian Science Quarterly."
 £1 10s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.

ARTS AND CRAFTS SUB-SECTION—*continued*.

- 213 Designed by MISS M. LLOYD and MISS M. S. BRUEN.
 LEATHER COVER: "Arbutus," for Christian Science
 Quarterly. £1 10s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 214 By MISS M. LLOYD.
 LEATHER COVER, for Christian Science Journal. £1 10s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 215 By MISS M. LLOYD
 LEATHER COVER: "Great Bear," for Christian
 Science Quarterly £1 10s.
 Exhibited by MISS M. S. BRUEN, Oak Park, Carlow.
- 216 By MISS ALBINA COLLINS.
 LADY'S BELT, Embossed Leather. £3 3s.
 Exhibited by MISS ALBINA M. COLLINS, Central Technical
 School, Clonmel, Co. Tipperary.
- 217 By MISS ALBINA M. COLLINS.
 LEATHER PANELS FOR A CASKET. £1 11s. 6d.
 Exhibited by MISS A. M. COLLINS, Central Technical
 School, Clonmel, Co. Tipperary.
- 218 By MISS MEAVE E. M. O'BYRNE, under MISS ALICE JACOB,
 at the Metropolitan School of Art, Dublin.
 CASE, OF LEATHER.
 Lent by the DEPARTMENT OF AGRICULTURE AND
 TECHNICAL INSTRUCTION FOR IRELAND.



List of Industries represented in Home Industries Section, with Postal and Telegraphic Addresses,
and Possibilities of Output.

LINEN AND WHITE EMBROIDERY.

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
Thomas Bankhead, "Hand-loom Fine Linen," John S. Brown & Sons, Ltd.	Ballymontra, Ahoghill, Co. Antrim Ulster Works, Belfast ...	Linen ... Hand-woven Linen, Damask, &c., Hand-embroidered & Hem-stitched.	Ahoghill ... Belfast ...	200 4,000	Open for orders More hands wanted
Garryhill Cottage Industry ... "Clare Embroidery" Industry ... East Clare Embroidery Class ...	Garryhill, Co. Carlow ... Ballyalla, Ennis, Co. Clare ... Scariff, Co. Clare ...	Drawn work and Embroidery. Smocking and Embroidery. Smocking and Embroidery.	Fenagh ... Ennis ... Scariff ...	42 — —	Ready market for goods. Ready market for goods. Class only recently started.
South Derry Cottage Industry ... Mrs. Hamilton's Brownhall Cottage Industry ... Drumbeg Industry ... Co. Donegal Joint Technical Instruction Committee :— Letterkenny Sprigging Class ...	Bellaghy, Co. Derry ... Brownhall, Ballintra, Co. Donegal ... Mount Charles, Co. Donegal ... Letterkenny, Co. Donegal ...	Embroidery ... White Embroidery ... Embroidery ... Embroidery	Bellaghy ... Ballintra, 14 miles distant. Mount Charles ... Letterkenny ...	Under 100 — 60 120	Open for orders. Ready market. Ready market and more labour available. Ready market and more labour available.
Malin Sprigging Class ... Clonlea Parish Sprigging Classes ... Drumbologue Sprigging Class ... John Crosbie ... Co. Down Com. of Agriculture and Technical Instruction.	Malin, Co. Donegal ... Lifford, Co. Donegal ... Letterkenny, Co. Donegal ... Donaghadee, Co. Down ... Lisburn ...	Embroidery ... Embroidery ... Embroidery ... Embroidery ... Embroidery	Malin ... Lifford ... Churchill ... Donaghadee ... Lisburn ...	100 35 12 40 —	do. do. do. do. Itinerant Instruction.

LINEN AND WHITE EMBROIDERY. — Continued.

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
Strangford Lough Industry ...	Old Court, Strangford, Co. Down	Coloured Embroidery	Strangford ...	85	Ready market and more labour available
Loreto Abbey ...	Dalkey, Co. Dublin ...	Embroidery ...	Dalkey ...	25	do.
Royal Irish School of Art Needlework, Fermanagh Co. Committee of Agriculture and Technical Instruction : Casheldunra Spinning Class ...	20 Lincoln Place, Dublin	Coloured Embroidery	Nassau Street	30	do.
Brallagh Spinning Class ...	Killyclogher, Co. Fermanagh ...	Embroidery	Killyclogher	10	Ready market and more labour available.
Moneyguineen Home Industries Society	Belleek, Co. Fermanagh	Embroidery	Belleek ...	7	do.
Co. Meath Home Industries Society ...	Kinnitty, Birr, King's Co.	Smocking and Embroidery	Kinnitty ...	50	Ready Market and more labour available
Industrial Association, Mountmellick ...	The Depot, Navan, Co. Meath ...	Drawn Work and Embroidery.	Navan ...	50	Open for orders.
Abbeyleix Work School ...	Mountmellick, Queen's Co.	Mountmellick Embroidery.	Mountmellick	8	do.
St. Ann's Industry ...	Bluegate, Abbeyleix, Queen's Co.	Embroidered Frocks, &c.	Abbeyleix ...	12	Ready market for goods.
Turbot-ton Cottage Industry ...	Kilbeggan, Co. Westmeath	Embroidery ...	Kilbeggan ...	70	Open for orders.
Embroidery Class, Crawford Municipal Technical Institute.	Coole, Co. Westmeath ...	Embroidered Screen ...	Castledpollard	16	Open for orders, but no more labour available.
Congested Districts Board for Ireland : Embroidery and Drawn Work Class	Ennet Place, Cork	Embroidery	Cork ...	40	Open for orders.
	Ardsall Co. Donegal ...	Embroidery			

WOOLLENS.

*Hand-spun and Hand-woven, Machine-spun and Hand-woven; also Goods
from Small Factories.*

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
Neil McNelis, Donegal Cottage Industry	Ardara, Co. Donegal	Homespun and Wool Dyes.	Ardara	—	Open for orders.
Co. Antrim Hand-loom Industry	Aboghill, Co. Antrim	Homespun	—	—	—
P. H. McKeown	Leenane, Killery Bay, Co. Galway	" Connemara Tweed "	Leenane	100	Ready market for goods, and more labour available.
John Hanly, Ballyortella, Woollen Mills	Nenagh, Co. Tipperary	Flannels, Tweeds and Blankets.	Dromineer	16	do.
Convent of Mercy	Gort, Co. Galway	Colleen Cloaks	Gort	20	Open for orders.
Joseph Mansfield, "The Spinning Wheel"	Kenmare, Co. Kerry	Homespun and Dyed Wools.	Kenmare	—	Ready market and labour available.
P. J. O'Shea	Cahiriveen, Co. Kerry	Hand-made Homespun.	Cahiriveen	6 to 10	Open for orders
Castlebar Home-spun Tweed Industry	Castlebar, Co. Mayo	Homespun	Castlebar	100	Ready market and more labour available.
Paul Kenna, Ballinakill Flannel Industry	Ballinakill, Queen's Co.	Tweeds and Flannel	Ballinakill	2	Open to orders.
Thomas, Capthorne, Bantry Woollen Mills.	Bantry, Co. Cork	Tweeds and Homespuns.	Bantry	26	Ready market.
C. J. Sheehan & Sons, Woollen Factory	Dungarvan, Co. Cork	Homespun and Tweeds.	Dungarvan	20	Ready market and more labour available.
Robert Eadie & Sons, Kerry Woollen Mills.	Beaufort, Co. Kerry	Blankets, Rugs and Tweeds.	Beaufort	9	Open for orders.

CARPETS AND RUGS.

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
Donegal Carpet Industry— Factories: Killybegs, Kilcar, Crolly, Annagry	The Manager, Carpet Factory, Killybegs, Co. Donegal	Hand-tufted Carpets	Killybegs ...	400	—
Naas Co-operative Home Industries Society, Limited.	The Manager, Carpet Factory, Naas, Co. Kildare	Hand-tufted Carpets and Rugs	Naas ...	30	—
The Abbeyleix Carpet Factory ...	The Manager, Carpet Factory, Abbeyleix, Queen's Co.	Hand-tufted Carpets and Rugs	Abbeyleix ...	40	—

HAND-MADE HOSIERY.

Birr Castle Knitting Industry ...	Birr, King's Co. ...	Hosiery ...	Birr ...	20	Ready market and more labour available.
Curraghmore Knitting Industry ...	Portlaw, Co. Waterford	Hosiery ...	Portlaw ...	35	do.

MACHINE-MADE HOSIERY.

Reliance Hosiery Works ...	Weir Street, Bandon, Co. Cork ...	Hosiery ...	Bandon ...	18	do.
Bandon Hosiery Co., Ltd. ...	Bandon, Co. Cork ...	Hosiery ...	Bandon ...	70	Open for orders.
Longford Hosiery Co. ...	Longford ...	Hosiery ...	Longford ...	20	Ready market and more labour available.

MAKING-UP TRADE.

Carris Cottage Industry ...	Bagenalstown, Co. Carlow ...	Frocks ...	Bagenalstown ...	8	Open for orders.
Donegal Shirt Industry ...	Buncrana, Co. Donegal ...	Shirts and Collars ...	Buncrana ...	100	do.
St. Ita's Shirt Factory ...	Hartington Street, Limerick ...	Shirts ...	Lower Cecil Street ...	35	Open to orders.
Convent of Mercy ...	Castlebar, Co. Mayo ...	Underclothing ...	Castlebar ...	10	Ready market and more labour available.

LACE AND CROCHET.

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
Urker Lace Class ...	Crossmaglen, Co. Armagh	Carrickmacross Lace	Crossmaglen	100	Ready market and more labour available.
Co. Cork Industrial Association	22 South Mall, Cork	Lace and Crochet	Cork	—	do.
Riverstown Lace Class ...	Riverstown, Co. Cork	Limerick Lace	Glanmire	14	do.
Blarney Crochet Cottage Industry	St. Ann's Hill, Co. Cork	Crochet	St. Ann's Hill	25	do.
Convent of Mercy	Queenstown, Co. Cork	Carrickmacross and Crochet.	Queenstown	60	Open for orders.
St. Joseph's Convent School	Kinsale, Co. Cork	Limerick Lace and Crochet.	Kinsale	140	do.
Youghal Co-operative Lace Society	Youghal, Co. Cork	"Needlepoint" and Crochet.	Youghal	500	Ready market and more labour available.
St. Joseph's Technical School, Convent of Mercy.	Bantry, Co. Cork	Limerick Lace and Crochet.	Bantry	30	do.
South Presentation Convent	Douglas Street, Cork	Limerick Lace, Point Lace and Crochet.	G. P. O.	58	do.
Presentation Convent	Bandon, Co. Cork	Carrickmacross Lace and Crochet.	Bandon	30	do.
Macroom Convent Industrial School	Macroom, Co. Cork	Limerick Lace	Main Street P. O.	13	Open to orders.
Lace Class, Crawford Municipal Technical Institute	Emmet Place, Cork	Limerick Lace and Crochet	Cork	65	Ready market for goods, and more labour available
Convent of Poor Clares	Ballyjamesduff, Co. Cavan	Crochet	Ballyjamesduff	34	Ready market and more labour available.
Convent of Mercy	Cootehill, Co. Cavan	Carrickmacross and Crochet	Cootehill	12	do.
Mrs. Vere O'Brien's Lace School	48 George Street, Limerick	Limerick Lace (Run and Tambour)	Limerick	60	Ready market for goods.
Borris Lace Industry	Borris, Co. Carlow	Lace	Borris	14	Ready market, but no more labour available.
Corris Cottage Industry	Bagenalstown, Co. Carlow	Crochet	Bagenalstown	3	Open for orders.
Kilgobbin Lace School	Foxrock, Co. Dublin	Carrickmacross Applique.	Foxrock	7	do.
Cruagh Lace School	Tibradden, Rathfarnham, Co. Dublin.	Carrickmacross Lace	Rathfarnham	4	Ready market.

LACE AND CROCHET.—Continued.

NAME OF INDUSTRY	Address	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
St. Mary's Catholic Institution for the Deaf and Dumb	Cabra Dublin.	Limerick Lace	Philshoro'	8	Ready market and more labour available.
Crochet School, Sisters of Charity	Howth, Co. Dublin	Crochet	Howth	24	do.
Royal Irish Industries Association	76 Graffon Street, Dublin	Lace and Crochet			—
Co. Donegal Joint Technical Instruction Committee:—					
Falcarragh Lace Class	Falcarragh, Co. Donegal	Lace and Crochet	Falcarragh	30	do.
Lace and Crochet Class, St. Louis Convent	Bundoran, Co. Donegal	Carrikinacross and Bundoran Crochet Appliqué	Bundoran	100	do.
Ballyshannon Lace School	Co. Donegal	Crochet	Ballyshannon	84	do.
Ballybofey Crochet Class	Co. Donegal	Crochet	Ballybofey	40	do.
Latterkenney Crochet Class	Co. Donegal	Crochet	Latterkenney	39	do.
Drumbeg Industry	Mount Charles, Co. Donegal	Greek Lace	Mount Charles	10	Open to orders.
Strangford Lough Industry	Oldcourt, Strangford, Co. Down	Carrikinacross and Crochet.	Strangford	85	Ready market and more labour available.
Fermanagh Co. Committee of Agriculture and Technical Instruction:—					
Countess of Erne's Home Industry	Derrylin, Beltrahet, Co. Fermanagh.	Crochet	Berrylin	50	Ready market (through Countess of Erne).
Lattergreen Lace Class	Co. Fermanagh	Crochet	Flonemecourt	60	Ready market and more labour available.
Tempo Crochet Class	Co. Fermanagh	Crochet	Tempo	50	do.
Coonan Crochet Class	Fivemiletown, Co. Fermanagh	Crochet	Fivemiletown	6	Good market for special orders.
Moan's Cross Crochet Class	Brookeboro', Co. Fermanagh	Crochet	Brookeboro'	40	Good market and more labour available.
Coa Crochet Class	Ballinamallard, Co. Fermanagh	Crochet	Ballinamallard	27	do.
Brookeboro' Home Industries	Co. Fermanagh	Crochet	Brookeborough	78	do.
Irish Lace School, Convent of Mercy	Enniskillen, Co. Fermanagh	Lace and Crochet	Enniskillen	50	do.
Convent of Mercy	Tuam, Co. Galway	Carrikinacross Lace	Tuam	15	do.
Sisters of Charity	Clarenbridge, Oranmore	Lace	Oranmore	50	Market promising, more labour available.
Inistiogue Cottage Industry	Inistiogue, Co. Kilkenny	Crochet	Inistiogue	25	Ready market and more labour available.
Presentation Convent	Tralee, Co. Kerry	Crochet	Tralee	13	Open to orders.
Convent of Poor Clares Lace School	Kenmare, Co. Kerry	Needlepoint and Rose-point.	Kenmare		—

LACE AND CROCHET.—Continued.

NAME OF INDUSTRY	Address	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
Presentation Convent ...	Cahiriveen, Co. Kerry	Limerick Lace, Carriekmacross and Crochet.	Cahiriveen	50	Ready market, more labour available for private orders.
Monastery in Lace Industry McGree Institute ...	Co. Kildare ... Longford ...	Carriekmacross and Crochet.	Monasterevin Longford	30 50	Open to orders. Ready market and more labour available.
Convent of Mercy ... Co. Longford Home Industries, Ballin- alee Lace Class.	Granard, Co. Longford Garvagh, Edgeworthstown, Longford	Crochet ... Carriekmacross Lace	Granard Ballinalee	40 50	Ready market. do.
Crochet Industry, The Convent ...	Manorhamilton, Co. Leitrim	Fine and Clones Crochet.	Manorhamilton	60	Ready market, but no more labour available
Mrs. T. W. Filgate's Lace Centre ... Lace Industrial School, Convent of Mercy.	Ardee, Co. Louth ... Ardee, Co. Louth	Point Lace, Carriek- macross & Tatting.	Tallanstown Ardee	12 27	Open to orders. Ready market and more labour available.
Lace Department, Convent of Mercy ...	Dundalk, Co. Louth	Carriekmacross Lace and Crochet.	Dundalk	39	do.
Castlebellingham Co-operative Home Industries Society.	Castle Cossey, Co. Louth	Carriekmacross Lace	Castlebellingham	40	do.
Clogher Head Lace Industry ...	Clogher Head, Co. Louth	Crochet ...	Drogheda	40	do.
Convent of St. Louis ...	Monaghan ...	Lace ...	Monaghan	50	Open to orders.
Convent of St. Louis ...	Clones, Co. Monaghan	Crochet ...	Clones	15	Ready market and more labour available.
Collective Exhibit of Lace and Crochet organised by P. Kieran.	Ulster Arms, Monaghan	Lace and Crochet	Monaghan	400	do.
Convent of St. Louis ...	Carriekmacross	Carriekmacross Lace	Carriekmacross	130	do.
Convent of Mercy ...	Westport, Co. Mayo	Crochet ...	Westport	50	do.
Ballsbridge Co-operative Home In- dustries Society.	Mullafarta, Killala, Co. Mayo	Carriekmacross	Killala	56	Ready market.
Convent of Mercy ...	Castlebar, Co. Mayo	Crochet ...	Castlebar	25	Ready market and more labour available.
Convent of Mercy ...	Swinford, Co. Mayo	Limerick Lace and Crochet.	Swinford	12	do.
Co. Meath Home Industries Society ...	The Depot, Navan, Co. Meath	Carriekmacross and Crochet.	Navan	100	do.
Hewwood Lace Class ... Tisara Co-operative H. I. Society ... Lady Crofton's Point Lace Class ...	Ballinakill, Queen's Co. Athleague, Co. Roscommon Ballisodare, Co. Sligo	"Point Lace Crochet" Crochet ... Lace ...	Ballinakill Athleague Beetra	35 20	do. Open to orders.

LACE AND CROCHET—Continued.

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands.	REMARKS
Convent of Mercy ...	Ballymote, Co. Sligo ...	Limerick Lace and Carrickmacross.	Ballymote ...	20	Ready market and more labour available.
Presentation Convent ...	Thurles, Co. Tipperary ...	Limerick Lace	Thurles ...	16	Ready market and more labour available.
Sisters of Charity ...	Morton St., Clonmel, Co. Tipperary	Crochet ...	Clonmel ...	33	do.
Lissan Co-operative Society, Ltd.	Lissan, Cookstown, Co. Tyrone	Crochet ...	Cookstown ...	40	do.
Convent of Mercy ...	New Ross, Co. Wexford	Lace	New Ross ...	40	do.
St. Ann's Industry ...	New Ross, Co. Wexford	Rose and Flat Point Lace	New Ross ...	40	do.
CONGESTEE DISTRICTS BOARD FOR IRELAND, Collective Exhibit:—	Moate, Co. Westmeath	Crochet	Moate ...	25	do.
Sisters of Charity ...	Kilbeggan, Co. Westmeath	Carrickmacross Lace	Kilbeggan ...	20	do.
St. Louis Convent	Bonada Abbey, Tubbercurry, Co. Sligo. ...	Carrickmacross, Limerick Lace and Crochet.	Tubbercurry	200	Open to Orders.
Lace Class	Kiltimagh, Co. Mayo ...	Guipure and Appliqué Lace and Crochet	Glengarriff ...	No Returns.	
Lace Class	Glengarriff, Co. Cork ...	Guipure, Appliqué, and Limerick Lace	Glengarriff ...		
"	Ardara, Co. Donegal	Frill and Relief Crochet	Ardara ...		
"	Spiddal, Co. Galway	Crochet ...	...	
"	Carna, Co. Galway	Crochet ...	...	
"	Cliffoney, Co. Sligo	Crochet ...	...	
"	Shanaculan, Beaufort, Co. Kerry	Guipure and Appliqué Crochet ...	...	
"	Pullathomas, Co. Mayo	Crochet ...	...	
"	Doolooma, Geesala, Co. Mayo	Crochet ...	...	
"	Derrypark, Co. Mayo	Crochet ...	...	
"	Dereendaderg, Co. Mayo	Crochet ...	...	
"	Tournakeady, Co. Mayo	Crochet ...	...	

ART EMBROIDERY.

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
St. Louis Convent ...	Monaghan ...	Vestments ...	Monaghan ...	Limited	Ready market and more labour available
Loreto Abbey ...	Dalkey, Co. Dublin ...	Vestments ...	Dalkey ...	25	do.
Embroidery Department, Convent of Mercy.	Dundalk, Co. Louth ...	Vestments ...	Dundalk ...	14	do.
Dunleekney Cottage Industry ...	Bagenalstown, Co. Carlow ...	Coloured Embroidery	Bagenalstown	2	Open for orders.
Marfield Industry ...	Marfield, Clonmel ...	Coloured Embroidery	Clonmel ...	8	Ready market and more labour available.
Brownhall Cottage Industry ...	Brownhall, Ballintra, Co. Donegal	Pipers' Banners and Embroidery.	Ballintra ...	—	—

MISCELLANEOUS.

NAME OF INDUSTRY	ADDRESS	Nature of Manufacture	Telegraph Office	No. of Hands	REMARKS
Shannon Mat Industry ...	Foynes, Co. Limerick ...	Mats ...	Foynes ...	1	"Not yet been on the market."
Castlepollard Toy and Basket Industry	Castlepollard, Co. Westmeath ...	Toys ...	Castlepollard	10	Open to orders.
The Wexford Hat Co., Ltd. ...	Paul Quay, Wexford ...	Hats ...	Wexford ...	35	Sales rapidly increasing.
Sievegullion Shirt Factory ...	Mullaghbawn, Co. Armagh ...	Shirts ...	Mullaghbawn	80	Ready market and more labour available.
Tipperary Gloving Industry ...	Tipperary ...	Gloves ...	Tipperary ...	30	do.
The Dublin Cutlery Co. ...	Dublin ...	Knives ...	Dublin ...	11	Open for Orders.

ARTS AND CRAFTS SUB-SECTION.

INDEX

TO

EXHIBITORS, ARTISTS, AND CRAFTSMEN.

The Figures refer to the corresponding numbers in the Catalogue.

Abbeyleix Carpet Factory—45, 46, 49, 52.
Allen, Miss Dora K.—155, 166, 188, 190.

Belfast School of Art—48, 69, 131, 132, 133, 169,
176, 187, 189.

Bellow, J.—15, 28, 30.

Buckley, W.—47.

Bourke, Miss Bridget—124.

Boyd, Miss—73, 147.

Braithwaite, Charles—114, 115.

Bray Art Furniture Industry—7, 13, 14, 15, 16,
17, 23, 24, 27, 28, 29, 30.

Brendon, J.—1.

Brien, Miss Nora—152, 177.

Brittain, Miss Alice—169, 176, 187, 189.

Bruen, Miss M. S.—192, 193, 198, 199, 200, 204,
212, 213, 214, 215.

Burke, J.—15, 24, 27.

Burke, James J.—156, 174, 184, 185.

Burke, Miss Susan—129.

Busby, Henry—88, 93.

Campbell, Miss M. C.—148, 206, 207.

Carruth, Samuel—77, 85, 89, 95, 96.

Carter, Miss G.—187.

Casey, Miss Nora—125.

Child, A. E.—Pupils—39, 40, 41, 42.

Clarke, J. J.—51, 54, 58.

Clarke, J., and Sons—51, 54, 55, 58, 59.

Clonkeen Wood Carving Class—47.

Cogle, H. G.—48, 131, 132, 133.

Cogle, Mrs.—131, 132, 133.

Collins, Miss Albina M.—196, 211, 216, 217.

Connolly, P.—13.

Cork School of Art. (See Crawford.)

Courtney, Miss Isabel—68, 197.

Crawford Municipal School of Art, Cork—2, 9,
11, 12, 19, 20, 21, 50.

Curran, Thomas—84, 86, 90, 92.

Dawson, R. A., A.R.C.A.—53, 70, 180. Pupils—48,
69, 131, 132, 169, 176, 187, 189.

Dawson, Mrs.—53, 70.

Dempsey, Joseph—119.

Department of Agriculture and Technical Instru-
ction for Ireland—39-42, 126, 137, 145, 152,
154, 155, 156, 157-160, 162-168, 173, 174,
177, 178, 179, 181, 182, 184, 185, 186, 188,
190, 191, 194, 195, 202, 205, 208, 209, 210,
218.

Donovan, Wm.—11, 20.

Doran, Miss Florence—173, 186.

Doran, Miss Mary—163, 168.

Douglas, W. J.—35, 63, 64.

Dudley, Countess of—153.

Dun Emer Press—140.

Dunny, Miss B.—25, 26.

Fagan, Miss Blanche—204, 212.

Falkiner, Miss R. G.—66, 75.

Falkiner, Travers—76.

Fox, Miss Kathleen—137, 181.

Freeth, James W., A.R.C.A.—175.

Gale, Mrs. M. D.—50.

Gilmore, Miss E.—69.

Glover, W.—7, 28.

Graham, Miss Anna L.—56, 62, 194, 202, 209.

Gröne, Miss R. H.—38.

Hackett, Mrs. J. M. Sadleir—76.

Hackett, Miss A. G. Sadleir—76.

Herbert, Miss Gwendolin—37, 161, 179, 183.

Higgins, Joseph—12, 19.

Hoey, James—145.

Irish Art Companions—36.

Jacob, Miss Alice—Pupils—126, 137, 145, 194,
195, 202, 205, 208, 209, 210, 218.

Jacques, Wm.—9, 21.

Johnstone, Miss Elizabeth—159, 205.

Kane, Miss René Romney—164, 178.

Kelly, Miss Eleanor—134, 138, 141, 142, 146, 150,
151.

Kelly, Miss Elizabeth—195.

Kendal, J.—110.

Killarney Furniture Industry—113.

Lalor, Miss Bridget—127.

Lawrence, Mervyn—36.

Lee, S.—7, 23, 28.

Lloyd, Miss M.—192, 193, 198, 199, 200, 213, 214,
215.

Makay, W.—1.

Mahalm, Miss Mary—117, 120.

Malony, Miss Helena—130.

Mayo, Earl of—36, 140.

M'Cullagh, W.—7.

M'Dermott, Miss Edith K.—44, 57.

M'Gahon, C. J.—1.

M'Gowan, Edwin W.—43.

M'Namara, M. J.—50. Pupils—2, 9, 11, 12, 19,
20, 21.

Megahey, Wm. H.—5, 6.

Metropolitan School of Art. (See Department of
Agriculture and Technical Instruction for
Ireland.)

Molesworth Street Committee—33, 34, 38.

Moller, M.—7.

Molony, James—47.

Montgomery, Capt. H.—85.

Montgomery, H. de F.—88, 93.

Egan, Daniel—66, 75.

RURAL LIFE AND INDUSTRY.

ARTS AND CRAFTS SUB-SECTION.—INDEX—*continued*.

- Montgomery, Mrs.—77-112.
Moulang, Daniel—170 171. 172.
Murphy, Miss Nora—157, 158, 162, 165.
- Naas Co-operative Home Industries Society, Ltd.—
25, 26.
Nagle, W. F.—55. 59.
- O'Brien, Miss C.—203.
O'Brien, Miss Catherine—39.
O'Brien, Mrs. Vere—124, 125, 127-130.
O'Byrne, Miss Meave E. M.—126, 154, 208, 218.
O'Connor, Denis—113.
O'Dea, Miss Mary—128.
O'Hare, J.—1.
O'Hare, H. and J.—1.
O'Malley, Peter—121.
O'Rourke, Miss Alice M.—116.
- Pearse, Wm. J.—34.
Power, Albert—31, 33.
- Reeves, P. Oswald, A.R.C.A.—153, 191. Pupils,—
152, 154, 155, 156, 157, 158, 159, 160, 162-168,
173, 174, 177, 178, 179, 181, 182, 184, 185,
186, 188, 190,
Reid, Mathew—79, 80, 82, 83, 94.
Rhind, Miss Ethel—40, 41, 42.
Rigney, Francis J.—160.
Ring, P.—28.
Ritchie, Miss Alice—189.
- Roche, P.—78, 81, 87, 91, 97, 98, 99, 100, 101-109,
111, 112.
Rossiter, Miss Nina E.—210.
Royal Irish School of Art Needlework—67, 72,
73, 136, 143, 147.
- Scott, Miss Gladys—71.
Scott, Miss K. A.—29.
Shaw, Miss Alice—3, 4, 10, 18, 32, 61, 139.
Sisk, Wm.—2.
Symes, Miss Ethel—182.
- Temple, Miss—143.
Thorp, Herbert Ingham—25, 26.
Tivy, C. Payne—8, 22.
Twemlow, Mrs.—65.
- Vinycomb, John, M.R.I.A.—118, 122, 123.
- Ward and Partners—35, 63, 64.
Warwick, G.—1.
Whelan, Wm. L.—167.
Whitty, Miss St. John—13, 14, 15, 16, 17, 23, 24,
27, 28.
Widdup, Miss—72.
Williams, J.—77, 78, 79, 81, 86, 90, 91, 94, 95,
100, 104, 105, 107.
Williams, Miss Mary—82, 83, 84, 92, 96.
Wilson, Miss—136.
Wyatt, Mrs. H. H.—135, 144, 149, 201.
- Yeats, J.—73.



*The Irish Cottage at the Irish International Exhibition
erected by the Manufacturers of*

McCLINTON'S SOAP

Special Dublin Exhibition Offer.

Sample Boxes sent, postage paid, from our
works to any address in United Kingdom.

Gentlemen's containing Toilet & Shaving Soap	}	Prices 2/-, 2/6 3, -, 4/-, 5/-
Ladies' - - - - Toilet Soap		

These Boxes contain one-third more than the usual quantity
retailed at these prices; *also an artistic enamelled match
holder representing the fireside in the above cottage.*

McCLINTONS, DONAGHMORE, IRELAND.

"Irish Industries"

76 Grafton Street, Dublin. SIXTY YEARS A
LACE STORE.



Irish Goods Only.

Hand-made Lace and Embroidery ;
Tweeds, Homespuns, etc.

THE REVIVAL OF IRISH INDUSTRIES.

THIS VOLUME IS PRINTED
ON PAPER MADE BY US AT
OUR BALLYCLARE MILL. . .

DO YOUR PART.

SEE THAT . . .
YOUR FRIENDS
DO THEIRS . . .



Remember the
—Words—

“United
Effort.”

Remember the
—Object—

“Irish
Prosperity.”

Therefore begin by using

Irish-made Paper

WHICH IS . . .
WATERMARKED

— “Ulidia” and —

“Ballyclare, Co. Antrim.”

ALL LEADING STATIONERS CAN
SUPPLY IT.

Finest Quality Drawing Cartridge,
Copy Book, Note-paper, Circular
and Programme Papers, Poster
and Coloured Papers—all made by

The NORTH of IRELAND PAPER MILL Co., Ltd.,

BALLYCLARE, LARNE, and BELFAST, CO. ANTRIM.

The "C.D.B." Hive

EDMONDSON BROS.,
10 DAME STREET,
DUBLIN.

EDMONDSON BROS.,



EDMONDSON BROS.,

10 DAME STREET,
DUBLIN.

First Prize Royal Dublin Society's Shows 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1906 and 1907.

The Hive selected by the Congested Districts Board for supply to Beekeepers in Donegal and West and South of Ireland.

Weed Comb Foundations, Sections, Bar Frames, Feeders, etc., etc.

EDMONDSON BROTHERS

10 DAME STREET, DUBLIN.

Telegrams:—"Beehives, Dublin."

Telephone: 1721.

THE CHIEF CAUSE

Of INTEMPERANCE and EMIGRATION

is the DULL MONOTONY of Village Life.

THE REMEDY

is to be found in entertainments and social gatherings at regular intervals. Concerts are difficult and sometimes impossible to organise, in remote districts, but magic lantern entertainments (which are always popular) can be arranged at a trifling cost. No technical knowledge or talent is required—the outfit is not expensive, and slides can be sent for each entertainment per parcels post.

We supply all necessaries and have a stock of 40,000 slides, in sets, with descriptive readings, for hire. Almost any subject—Travel, History, Religious, Temperance, Educational, and Comic—can be hired.

Write for Catalogue, post free.

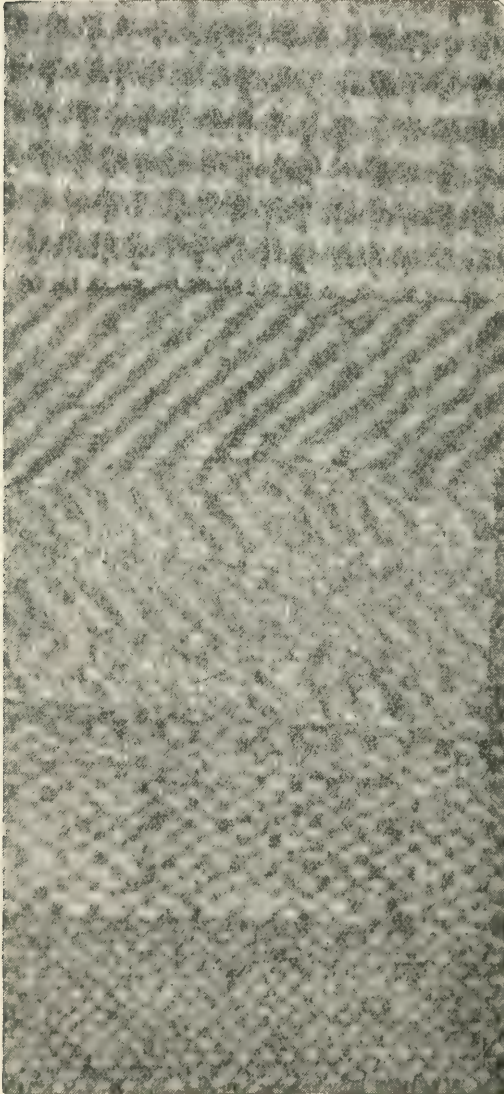
T. MASON, Optician,

Established 1780.

5 Dame Street, Dublin.

Extract from "The Fishing Gazette," Feb. 17th, 1906.

"CAPITAL STUFF for FISHING SUITS."



"MR. THOMAS COPITHORNE, Bantry Woollen Mills, Bantry, Ireland, sends me some samples of his celebrated purewool Bantry tweeds, 'homespun,' serges and friezes, and asks if I would mind noticing them in the 'Fishing Gazette.' I am glad to do so, as I can speak from two years' personal experience of the excellent quality and moderate price of the goods.

I bought also some materials for ladies' costumes, which gave also perfect satisfaction. Visitors to Bantry are invited to visit the mills, where they can inspect the goods in every stage of progress in actual manufacture from the fleece to the finished cloth. Our black and white illustration gives an idea of a few of the patterns, but I advise anglers to write for samples for their own use and for their families.—R.B.M."

Patterns of these Goods
sent post free to
any address by

**THOMAS
COPITHORNE**
Woollen Mills,
Bantry.

"Photographed from Samples of the Pure Wool Homespun Suitings made at Mr. Thomas Copithorne's Woollen Mills, Bantry, Ireland."

Any length cut. Carriage Paid in the United Kingdom on Suit or Costume Length.

KILKENNY WOODWORKERS.

8 Nassau Street, Dublin.

THIS INDUSTRY has been established, primarily, to employ Irish labour in the production of really reliable furniture at possible prices. To be successful it is necessary to obtain the confidence of the public at large. With this end in view, nothing has been left to chance. A factory has been built and fitted with the best machinery to be obtained, and is driven by electricity. The workshops are airy, wholesome and well-lighted. Absolutely seasoned wood is guaranteed to every customer.



CABINET MAKERS' SHOP.

thanks to a very remarkable system of drying, installed by Messrs. Maguire and Gatchell, the well-known engineers.

Accommodation for our workpeople was a difficult question for a time, but has been quickly solved by the erection of cottages and a furnished club-house with fifteen bed-rooms.

Wholesale business and contracts are undertaken at a special rate, and we are well able to supply, not only furniture for the home, but fittings and fitments of all kinds, whether for the bank, office, or other use.

Our new Showrooms at 8 Nassau Street, Dublin, have been opened with a view to demonstrating our undoubted capacity to carry out, to complete satisfaction, any orders that may be entrusted to us.

MRS. T. W. FILGATE,
Lissrenney, Ardee, Co. Louth,

TAKES ORDERS FOR
NEEDLEPOINT LACE,
"LISSRENNEY" LACE,
AND FOR
COPYING, MENDING,
AND
TRANSFERRING OLD
LACE.

All Done in the Workers' Own Homes.

CARRICKMACROSS LACE.

Ballinalee Lace Class,
Co. Longford. 

Orders promptly executed for Carrickmacross
and Irish Crochet Lace. Handkerchiefs,
Collars, Cuffs, Ties, Berthes, Boleros, Flounces,
Edgings, Veils, Sleeves, &c.

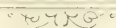
Direct from the worker to the buyer.

FULL PARTICULARS TO BE OBTAINED FROM

Mrs. J. Mackay Wilson,
Garvagh, Edgeworthstown.

ADVERTISEMENTS.

Moneyguyneen (Kinnitty) Home Industry Co-operative Society, Limited.



Children's Frocks, Pinafores, and Blouses smocked and embroidered.

Muslin and Linen Bed Spreads, and Cushion Covers, Tea Cloths,
Toilet Covers, Hem-stitched Towels, etc.

Ladies' Blouses and Dresses smocked or embroidered to order.

Overalls with or without sleeves, Aprons, etc., etc.

Orders promptly executed by—

MRS. ASSHETON BIDDULPH, or MISS DUGAN,

Moneyguyneen (Kinnitty) Home Industry Co-operative Society, Ltd.,
KING'S COUNTY.

Convent of Mercy, Dundalk.

The Sisters of Mercy will feel grateful
for orders for the following,

VIZ. :—

Vestments, Altar Linens, Stocks,
Birettas, Irish Lace, Crochet,
Hosiery, Jerseys, &c., and also
Embroidery for Household purposes.

MADE BY THE GIRLS EMPLOYED IN THEIR TECHNICAL SCHOOL.

ALL ORDERS PROMPTLY ATTENDED TO

PRESENTATION CONVENT, THURLES.

IRISH Crochet (Clones and Raised) Limerick Lace (tambour and run), worked in best finished style at above Convent. Orders from firms and private customers promptly attended to and perfect satisfaction guaranteed. Prices moderate. Send for samples of our work.

Dressmaking, Shirtmaking, and all classes of Knitted Goods, Underclothing, etc., are also made. Orders Solicited.

DRUMBEG INDUSTRY.

For Irish Hand Embroideries, Dresses, Blouses, Flounces, Bedspreads, Cushion Covers, Collars and Cuffs, Etc., Etc.

All Hand Worked by the Donegal Peasantry.

— Numerous Choice Designs. —
Goods sent on approval, carriage paid.
Letter Orders promptly attended to.

Ladies' and Children's Underclothing Embroidered.
Ladies' Own Materials taken and Embroidered.

**Apply Manageress, Drumbeg Industry,
Mountcharles, Co. Donegal.**

IRISH CROCHET.

INISTIOGUE COTTAGE INDUSTRY.



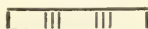
Inistiogue, from Graigue Road.

Co. Kilkenny.

- | | | |
|------------|---|--|
| BOLEROS | - | Finest Raised Crochet, from
3 Guineas. |
| BOLEROS | - | "Combination" fine and coarse
Lace, from 6 Guineas. |
| INSERTIONS | - | Blouse Sets, Motifs. |
| COLLARS | - | Yokes, &c., made to order |

CROCHET DESIGNS—DESIGNED AT THE INDUSTRY
FROM VALUABLE OLD AND ORIGINAL CROCHET.

*All Communications to be addressed to THE SECRETARY,
INISTIOGUE, Co. KILKENNY*



Wm. Scott & Co., Ltd.,

Ladies' and Gentlemen's Tailors,

2 Lower Sackville Street, Dublin,

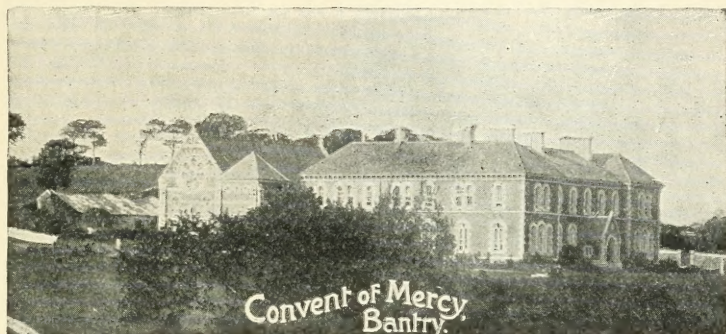
And at 24 ALBEMARLE STREET, LONDON.

Irish Tweeds.

*Ladies' Costumes of Irish Tweeds
from McKeown's of Leenane.
Irish Tweed Suits from Timony
and Mc Gee's of Donegal.*

Riding Habits, Costumes, &c. Gentlemen's Hunting
Coats, Riding Breeches.

Leather and Box Cloth Gaiters, Motor Coats, &c.. &c.



**IRISH
LACE**

MADE IN
**CONVENT of MERCY,
BANTRY,**
CO. CORK, IRELAND.

Monasterevan Lace Class,

CO. KILDARE.

ORDERS THANKFULLY RECEIVED FOR
CARRICKMACROSS GUIPURE & APPLIQUE LACES,
SCARFS, FICHUS, BOLEROS, COLLARS, &c., &c.

Mount-Mellick Work of all kinds. Quilts, Toilet Covers, &c., &c.

Broderie Anglaise (or Cut Work). Trimmings, Edgings, Insertions.

HARDANGER EMBROIDERY. SOFA COVERS, COLLARS, CUFFS, &c.

LACE CLEANED AND MENDED.

DIRECT FROM WORKER TO BUYER; NO SALARIED OFFICIAL.

Full Particulars to be obtained from

Mrs. Wheble (*Manager*),

MONASTEREVAN, Co. KILDARE;

OR

The Countess of Drogheda (*Patroness*),

Moore Abbey, Monasterevan, Co. Kildare.

ADVERTISEMENTS.

A HOME OF INDUSTRY.



This is a view of our Factory—

THE ACME WORKS, DAME COURT.

Though only ten years built we have recently had to erect an extensive addition to enable us to deal with the rapidly increasing business. Our Labour Bill is now £300 per Week.

We appeal to you for support, and are confident it will be to your advantage. We can give you **Good Service, Good Work,** and **Good Value,** and you will be helping to keep more of our local workers employed.

HELY'S, LIMITED,

MANUFACTURING STATIONERS,

Lithographic and Letterpress Printers,

ACCOUNT BOOK MAKERS, &C.,

ACME WORKS, DAME COURT,

AND

27, 28, 29, & 30 DAME STREET, DUBLIN.

ADVERTISEMENTS.

JOSEPH MANSFIELD,

"The Spinning Wheel"

BY
APPOINTMENT

The House for Irish Hom

PRICES MOST MOD

IRISH PEASANT INDUS

The "EVERLASTING" Kenmare Hand-

Manufactured by the PEASANTRY, in their o

Wool of Black and White Shee

Make excellent hard-wear Suits and charming

Shooting, Cycling, Golfing, and general ki

ARTISTIC AND UNCOMMON

They are Patronized by His Maje

SUITS AND CAPS MADE UP TO ORDER.

SUPPORT the COTTAGE

A large and choice variety of PATTE

Post Free on receipt of Postcard, incl

of the BEST IRISH POWER

FANCY TWEEDS and COSTU

* Suit or Costume Lengths are sent

ALL GOODS ARE GUARANTEED, and if

exchanged or MONEY REFUNDED

CALL AT "THE SPINNING WH

Only 2 Minut

THE COUN

CASTLEBAR HOM

GENUINE

This Industry was started

Mayo, Ireland. The Tw

handspun yarns and ha

peasantry, are made in tex

men's wear, in white, pla

suitable for yachting, fi

colours make into

Width about

Prices, 3/-, 3/6, and 4/- a yard.

Requests for patterns should be addressed to

THE MANAGER, CASTLEBAR HOMESPUN TWEED

INDUSTRY, CASTLEBAR, CO. MAYO, IRELAND.

**University of Toronto
Library**

**DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET**

Acme Library Card Pocket
Under Pat. "Ref. Index File"
Made by LIBRARY BUREAU

